

AN ABSTRACT OF THE DISSERTATION OF

Janis Sabin Elliot for the degree of Doctor of Philosophy in Human Development and Family Studies presented on May 8, 1996. Title: Employed Mothers' Satisfaction with Child Care Choices: Perceptions of Accessibility, Affordability, Quality, and Workplace Flexibility.

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(Leslie Richards)

Interest in child care has grown dramatically, yet little is known about how families manage to ensure appropriate child care. In a secondary analysis of data from 642 employed mothers representing a wide range of income levels, this research identified the factors contributing most to mothers' satisfaction with child care arrangements. The study used an ecological model with accessibility, affordability, quality, and workplace flexibility as characteristics of the exosystem, and household income, presence of a spouse or partner, and age of the youngest child as characteristics of the microsystem. The research explored how individual family characteristics combine with environmental characteristics to impact parental satisfaction. Three questions guided the study:

(a) How do accessibility, affordability, quality of child care arrangements, and workplace flexibility affect parental satisfaction with child care arrangements?

(b) How do income, household structure, and child's age affect parental satisfaction with child care arrangements?

(c) How do these characteristics combine to affect parental satisfaction with child care arrangements?

As proposed, the study found that for most mothers in the study, accessibility and quality combine with income and household structure to impact satisfaction with child care arrangements. Poorer women who pay a greater percentage of household income had more concerns about quality and were more dissatisfied with their child care arrangement than women paying a lower percentage of income for care. Despite concerns about quality for mothers paying a greater percentage of income for care, affordability contributed more than quality to satisfaction with child care. The data provided evidence of a different trade-off for lower income families.

The results of this study have relevance for policies which address the needs of families at all income levels. The policy principles based on the results of the study include:

1. Basic health and safety regulations are important to quality and stability of care for all parents.
2. Financial assistance with the cost of child care is important, especially for those working families just above the poverty level.
3. Public support of services to improve child care is important to addressing the needs of all employed mothers, regardless of income status.

EMPLOYED MOTHERS'
SATISFACTION WITH CHILD CARE CHOICES:
PERCEPTIONS OF ACCESSIBILITY, AFFORDABILITY, QUALITY,
AND WORKPLACE FLEXIBILITY

by

Janis Sabin Elliot

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Doctor of Philosophy dissertation of Janis Sabin Elliot presented on May 8, 1996

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I understand that my thesis will be come part of the permanent collection of Oregon State University libraries. My signature below authorizes release of my thesis to any reader upon request.

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 Janis Sabin Elliot, Author

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This work began more than ten years ago with the encouragement of my parents, Edna and Owen Sabin. It started with my own deeply held belief that too many public policy decisions are uninformed by good research and that too much research is formulated without an understanding of the realities of the public policy arena. This desire to bridge these two domains in order to help parents carry out their responsibilities of family life in productive, fulfilling ways led to a graduate program and, thus, to this study. As the administrator of a public agency setting and implementing childcare policy, I have lived the questions researched in this study on an ongoing basis, thus an acknowledgement must include gratitude for the learning that every day at work has offered. Nothing important is ever accomplished alone and this project is evidence of that. The support and encouragement of my life partner, Patti, my sons Sean and Collin (who fortunately allowed me to finish my research before finishing his own graduate program) and of innumerable friends and family members lead the list of those who have been on my team for the duration. Although it is risky to single out so many people by name, I cannot go without expressing unmeasurable gratitude to Jane Peters and Marjorie MacRae whose basement provided solitude and a fully equipped computer and whose friendship included statistical expertise as well as support. Staff of the Oregon Employment Department, the Child Care Division and professional colleagues have stimulated, challenged, and supported this work, most especially by taking up slack when research pulled me away from ongoing duties. The enthusiastic support of Roger Auerbach, Acting Director and Chris Apgar allowed the job share arrangement which made "finishing" possible. Appreciation is also due faculty

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CHAPTER ONE

EMPLOYED MOTHERS' PERCEPTIONS OF QUALITY AND CHILD CARE CHOICES: THE CHALLENGE

Janus was the Roman God of beginnings...he was the guardian of gates and doors, and was well suited to the post since he had two faces that looked in opposite directions. Thus he could maintain two opposed perspectives at the same time: the past and the future, the homely and the worldly. Janus is also well suited to viewing the contemporary day care scene. That scene is best understood from multiple perspectives...the homely perspective of the child, parent, provider as well as the worldly perspective of the policy maker. It confronts concerned citizens with a series of stark dilemmas centering around the fundamental issue of quality and cost (Ruopp & Travers, 1982, p. 72).

The face of the American workplace has changed. Women have been entering the workforce in ever increasing numbers and women with young children are the fastest growing segment of the workforce (Eggebeen & Hawkins, 1990; Fuchs, 1998; Hofferth & Phillips, 1991; Sonenstein & Wolf, 1991). This study looks at perceptions of accessibility, affordability, and quality of child care arrangements made by employed mothers in the midst of this change. The study operates from the basic premise that finding and managing child care that is satisfactory for parents and children is a balancing act, one where parents must weigh the advantages and disadvantages of the options available and make a choice (Evetts, 1988; Nelson, 1989). This choice typically involves a "trade-off," a situation where parents settle for less than they might like in one area in order to obtain something they need more in another. Most often these trade-offs involve accessibility, affordability, and quality.

The influx of mothers into the workforce has been brought about by a number of factors. One of the most significant has been economic necessity (Bergmann, 1994; Fine, 1992; Hayes, Palmer & Zaslow, 1990; Winget, 1982; Zigler & Lang, 1991). While families with children experienced only a slight decline in real income between 1973 and 1984, this was only possible because more mothers entered the workforce (Marshall & Marx, 1991). With this increase in female labor force participation, particularly the employment of women with young children, there has been an increasing interest in child care. Child care has become a concern to families, employers, government, and policy makers. For most of recent history, child care was the responsibility of the family, most particularly the mother herself, not a matter for the public domain. It is increasingly apparent, however, that the inability of working families to find, manage, and pay for the care needed to sustain work force participation is a societal concern (Bergmann, 1994; Committee for Economic Development, 1993; Connelly, 1992; Hayes et al., 1990; Heckman, 1974; Winget, 1982; Zigler & Lang, 1991). In order to place these changing family circumstances into a broader context of public policy, this study will consider the ways public policy makers must also balance competing priorities in order to respond to changing economic and demographic circumstances.

Theoretical Perspectives

Theoretical perspectives from the study of human psychological development and economics are particularly helpful in understanding the factors affecting parental satisfaction with child care arrangements. Child care research has recently incorporated

the contributions of these disciplines to expand an understanding of family and child development (Garabaghi, 1983).

Theories of Human Development: Ecological Theory

Ecological theory proposes a broader approach to understanding human development, one that looks at the relation between the person and the environment. The ecology of human development is “the scientific study of the progressive, mutual accommodation of a human organism, and the environments in which it lives as the process is affected by the larger social contexts in which the settings are embedded” (Bronfenbrenner, 1977, p.514). The ecological environment is conceived of as a nested arrangement of structures, each contained within the next, moving from the microsystem to the macrosystem. The microsystem consists of the developing person and the immediate environment within which that person is found. The mesosystem moves beyond the immediate and direct relationships of family, home, and workplace to the larger network that connects the individual's microsystem to other microsystems. The exosystem is an extension of the mesosystem. It does not contain the developing person but impinges upon the immediate settings in which the person is found, thereby influencing what goes on there. The macrosystem differs fundamentally from the three preceding forms; it refers to the overarching institutional patterns of the culture, such as economic, social, educational, legal, and political systems of which the micro-, meso-, and exosystems are the concrete manifestations (Bronfenbrenner, 1979).

Ecological theory is particularly useful in an examination of parents' decision making regarding child care arrangements because of its simultaneous consideration of the individual family situation, the larger context in which the family lives and works, and the societal and cultural context in which public and private policies impact on family life. Ecological theory has been widely applied to the study of child and family development and has more recently been applied to work-family issues (Bronfenbrenner & Crouter, 1982). The focus on larger social contexts leads to a better understanding of the circumstances affecting the family and the child. Bronfenbrenner refers to the introduction of flexible schedules in the workplace as an example of environmental transformation consistent with ecological theory.

Economics: Rational Choice Approach

Some economists rely on the rational choice approach to explain human behavior, especially as it relates to the consumption of goods and services. The rational choice approach assumes individuals strive to get the most good out of their decisions. The definition of "most good" relies greatly on individual values, beliefs, and preferences. Becker (1991) says that consumers maximize their utility from basic preferences that do not change rapidly over time and ... that different behavior of different individuals is coordinated by explicit and implicit markets" (p.19). This approach has been applied by researchers to look at the trade-offs that influence child care choices (Blau & Holtz, 1992; Camaso & Roche, 1991; Hofferth & Chaplin, 1994). This perspective is a relatively recent but important contributor to child care research

(Blau & Holtz, 1992; Blau & Robbins, 1988; Cigno, 1991; Garabaghi, 1983; Michalopoulos, Robins, and Garfinkel, 1992; Verry, 1990). Much of the research guided by economic theory has focused on the macrosystem perspectives of public policy and the relationship between child care demand and labor supply (Michalopoulos et al., 1992). Rational choice approach applies these concepts to help understand the microsystem level decisions made by individual families.

There are limitations, however, to the usefulness of a rational choice approach. When looking at parental child care choices, Verry (1990, p.1) notes, "Child care issues touch on deeply held beliefs and notions of justice which may not be easy to accommodate fully in a strictly economic analysis of the subject." Nonetheless, the approach is useful. Parents evaluate the utility of each available option and choose the one that best suit their needs (Hofferth & Wissoker, 1992). The most elusive factor in this evaluation, and indeed in most, is the role that quality plays. Child care decisions involve weighing the cost and quality of one option versus another. The crucial consideration is quality, yet it is where we know the least when considering parental choices (Blau & Robbins, 1988; Camasso & Roche, 1991; Hofferth & Phillips, 1991).

Conceptual Model for This Study

Accessibility, affordability, and quality are all attributes of child care services that are largely outside the domain of parental control, yet each impacts the ability of parents to arrange for the child care they need while they work or attend school. Workplace flexibility, while not a child care attribute, is largely outside the parent's

control as well. Together child care accessibility, affordability, quality, and workplace flexibility are, in effect, characteristics of the family's environment. These environmental characteristics are comparable to the exosystem (Bronfenbrenner, 1977).

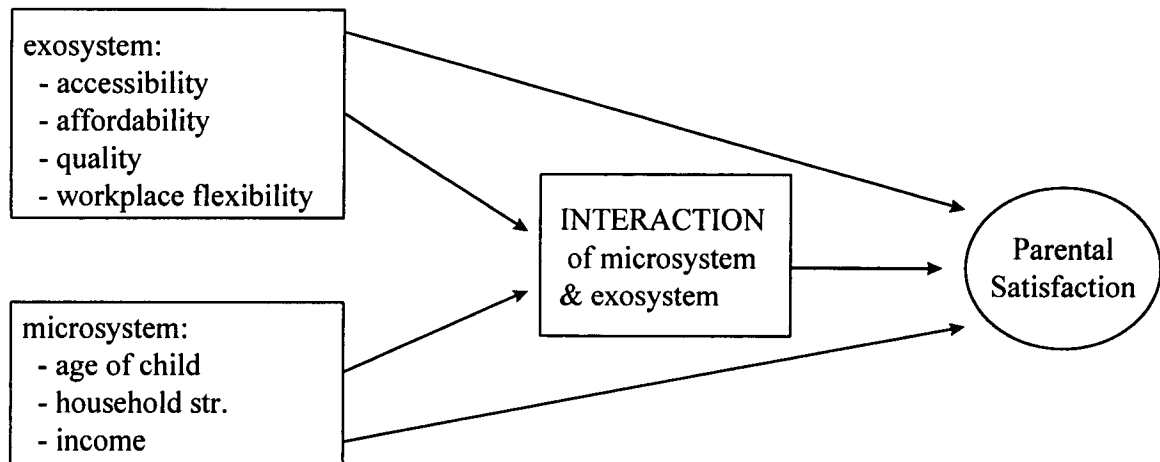
There are other characteristics more closely related to the family itself. Familial characteristics of income, household structure, and the child's age are understood to correspond to the microsystem of ecological theory.

The trade-offs that parents make can be understood through an ecological approach that examines the effect that accessibility, affordability, quality, and workplace flexibility have on perceived parental satisfaction with child care arrangements. An ecological perspective leads to an examination of the interaction between the micro- and exosystems and their effect on parental satisfaction.

The rational choice approach can increase understanding of the trade-offs that families make in choosing child care, especially when those choices are looked at in the context of the microsystem. A rational choice approach increases understanding of the broader social policy context that is part of the exosystem, for the policies that impact the lives of parents and children are influenced by the same constraints faced by working parents. Therefore the rational choice approach strengthens the conceptual model used for this study. Rational choice assumes that consumers weigh the different outcomes desired from a particular decision and make a choice that gets the best outcome possible on all counts. This means that a parent must balance the often competing desires for a child care arrangement that she considers affordable, accessible, and of high quality. Given the economic realities, it is unlikely that she can achieve optimal value on all three. She then makes the best decision she can under the

circumstances. This study looks at the extent to which these decisions result in satisfactory child care arrangements. The conceptual model for this study is illustrated as follows:

Figure 1.1. Theoretical model for predicting parental satisfaction with child care arrangements.



Research Questions

The study is guided by the following questions:

1. How do exosystem characteristics (accessibility, affordability, quality of child care arrangements, and workplace flexibility) affect parental satisfaction with child care arrangements?
2. How do microsystem characteristics (income, household structure, and child's age) affect parental satisfaction with child care arrangements?

3. How do exosystem and microsystem characteristics interact to affect parental satisfaction with child care arrangements?

Study Description

This study explores the circumstances contributing to employed mothers' satisfaction with their child care arrangements. The study examines the effect of accessibility, affordability, quality, and workplace flexibility on parental satisfaction. Accessibility, affordability, quality and workplace flexibility are conceptualized as exosystem factors because they are outside parental control. It further examines the extent to which microsystem characteristics of income, household structure, and stage of family development predict employed mothers' perceived satisfaction with child care arrangements. Finally, the study explores the interactive effect that micro- and exosystem characteristics have on parental satisfaction. The study uses secondary data analysis procedures on data collected from employees of 15 companies in Lane County, Oregon in the spring of 1990. The study was part of a community effort to help employers make decisions regarding dependent care policies for their employees.

These data afford an opportunity to look more closely at the factors influencing employed mothers' choices. The data are inclusive of all forms of non-parental care and provide information on many of the multiple factors that families must weigh in making their child care arrangements. Thus, the data allow for a better understanding of how families balance the factors that influence the very difficult choices involved in seeking, choosing, and maintaining child care for their children.

Chapter Two provides more detailed information on the literature regarding parental choices and perceptions of accessibility, affordability, quality, and workplace flexibility. It gives an overview of how other researchers have addressed these important concepts and identifies the rationale for the study of family circumstances that make it easier for employed women to make satisfactory child care arrangements. It includes a review of key policy concerns that are directly related to the study's research questions.

Chapter Three details the methods and procedures for the study and describes the sample and data analysis strategies. Chapter Four presents the results and Chapter Five discusses those findings, including policy implications of the study.

CHAPTER TWO

THE REAL WORLD OF EMPLOYED MOTHERS

Many working families manage to care for their children during working hours without ever turning to the child care market. They arrange for care by parents (through part-time or shift work for example), by older siblings or relatives, self-care arrangements for older children, and a myriad of other informal arrangements (Cooper, 1993; Emlen & Koren, 1993 ; Hayes et al., 1990; Porter, 1991; Siegel & Loman, 1991; Veum & Gleason, 1991; Zinsser, 1991). These options are increasingly difficult for many families, however, because the same economic conditions that pull mothers into the workforce are pulling potential caregivers into the workforce as well. Thus, the demand for market care has increased as the supply of potential caregivers has diminished (Committee for Economic Development, 1993; Garbarino, 1986; Presser, 1989).

There is further evidence that as mothers have increased their participation in the workforce, the suitability of many of these informal arrangements has diminished (Committee for Economic Development, 1993). For example, self-care arrangements for children raise concerns about the appropriateness for the child's needs. Advocates for the needs of "latch-key" children link inappropriate self-care arrangements to poor child outcomes (Miller, O'Connor, & Sirignano, 1995). The stress on marital and family relationships caused by long-term arrangements such as parents working different shifts is also of concern to families (Kelly & Vaydanoff, 1985; McEnroe, 1991; Presser, 1992). Although relative care is preferred by many working families, there are

difficulties with such care as well. Care by relatives is found to be less stable, creating turnover in child care arrangements that makes it difficult for parents to work. As grandmothers and aunts return to the workforce themselves, they may not live close enough to the family and they are sometimes not available for the full-time care that many parents need (Auerbach, 1988; Committee for Economic Development, 1993). There is also evidence that relative care is not as high quality as more formal care (Galinsky, Howes, Kontos, & Shinn, 1994; Galinsky, 1995).

A further dimension underlying the concern about child care is the increasing rate of child poverty, particularly in female-headed households (Bergmann, 1994; Feinstein, 1979; Fuchs, 1988). While there is some evidence that women's earnings are gaining slightly in comparison to men's (Crispell, 1991), overall the household incomes of women with children are declining relative to inflation. As a result, more young American children were living in poverty in 1993 than in the past 30 years (Phillips & Bridgman, 1995). Lack of affordable, accessible child care is identified as a major barrier to workforce participation, thus making it even more difficult for low-income families to break the cycle of poverty (Cattan, 1991; Corcoran & Hill, 1984; Feinstein, 1979; Fine, 1992; Siegel & Loman, 1991).

Policy Concerns

The focus of this study is on the impact that accessibility, affordability, quality, and flexibility have on the ability of employed mothers to achieve satisfactory child care arrangements. However, this question cannot be addressed adequately without an

understanding of the larger context within which families operate. This calls for an understanding of the child care system and the public and private policies that shape it. Until very recently, there was little need for public policymakers to concern themselves with child care because responsibility for care of children lay with the family. The increase in mothers' labor force participation and the large numbers of children living in poverty have resulted in greater attention to child care issues on the part of public and private policy makers. As a result, there has been growing discussion regarding the role of government in child care.

History of Government Involvement

Prior to 1970, government showed little interest in the child care concerns of employed women or the impact of childcare concerns on the workplace (Kamerman, 1984; Kamerman & Hayes, 1982; Klein, 1992; Phillips, 1994). One notable exception to this situation was during World War II when government and industry cooperated in a major effort to assure child care for women working for the war effort. The round-the-clock day care centers operated by the Kaiser shipyards and the child care services provided under the Lanham Act in 1941 represented a major public/private investment in child care for employed women (Klein, 1992). These programs were disbanded overnight, however, when the war ended and a massive campaign was waged to get women to return home from the workplace.

Government interest renewed in the 1970's when efforts at welfare reform included provision for child care assistance to women receiving Aid to Families with

Dependent Children (AFDC) in order to help them go to work. For the most part, however, federal government interest was slight and focused only on families receiving welfare assistance (Klein, 1992). The needs of the non-welfare "working poor" were of little interest to the federal government. Numerous attempts by women's rights organizations and child welfare advocates to gain federal government support for child care assistance were largely unsuccessful. Despite growing recognition of child care as a societal concern, there was not agreement on how society should respond. In 1971 President Richard Nixon vetoed comprehensive child care legislation citing concerns about government interference in the "rightful position" of the family (Klein, 1992). The debate continued for nearly two decades. The result was a lack of consensus and leadership in developing child care resources that supported children's development and helped parents work.

This situation changed in 1988 when Congress passed the Family Support Act of 1988, requiring a guarantee of adequate child care for welfare mothers participating in work and training programs. The government's role expanded in 1990 when Congress passed the Child Care and Development Act of 1990 and substantially increased federal spending for child care for the working poor (low income working families not receiving AFDC). For the first time, conservative and liberal interests in Congress transcended the debate over whether government should encourage women to work or stay at home and acknowledged the presence of women in the workforce in the United States (Klein, 1992). The question was no longer whether government should be involved, but rather how government should be involved.

The Child Care Marketplace

Although policy makers, both public and private, ignored the impact of changing demographics and economic conditions on families in the United States, families could not. Families were coping - struggling in many cases - to manage caring for their children's needs and adapting to a lifestyle that was very different from that experienced by previous generations. Women were going to work outside the home, fathers were adapting to changes in the household, and children were doing the best they could under the circumstances (Auerbach, 1988). In the absence of a clear policy direction, informal systems were evolving. Deborah Phillips wrote in "Defining and Valuing Quality as a Parent" (1994, p. 44):

Ideologies about free enterprise capitalism, the privacy of the family, and the supremacy of exclusive maternal care have worked against the development of a stable, adequately funded system of non-parental care that meets the needs of most families...As a consequence, the vast majority of families in the USA face the search for child care on their own without substantial assistance in paying the cost of care.

More recently, the child care picture in the United States is increasingly understood as a market-based system. It is a system where parents, as consumers, operate in a free-market to obtain the services they need to meet their family's needs. "Parental choice," the term used by free-market advocates, is the prevailing value in the United States (Phillips, 1994). While the debate continues on whether this free market system serves children and families well, most advocates and policy makers agree that

the role of parents is central. The system is largely funded by individual family expenditures and is shaped by a variety of market forces. Among those market forces, consumer choice is a major influence. A number of factors come to bear on how consumers make their choices.

Child Care Choices of Working Parents

Because parents are consumers operating in the child care market place, it is essential that the factors guiding their decisions be understood as thoroughly as possible. One important starting point is an examination of the actual choices that working families make and how those choices vary by family situations (Atkinson, 1987; Emlen & Koren, 1993; Gibeau & Anastas, 1989; Hayes et al., 1990; Marshall & Marx, 1991; Porter, 1991; Seigel & Loman, 1991; Waite, Leibowitz, & Witberger, 1991; Zinsser, 1991).

Many families rely on non-market solutions to meet their child care needs (Emlen & Koren, 1993; Hofferth, Brayfield, Deich, & Holcomb, 1991). They adopt a variety of options to help them balance the need to work and the need to assure care for their children including postponing workforce participation, working part-time until children are older, and working different shifts. They rely on relatives both in and outside the home and they rely on children to care for themselves, especially as children get older. Although, families often pay relatives to care for their children because the relatives

themselves may be foregoing workforce participation in order to care for the children, these arrangements are considered non-market care because the persons providing care are doing so because of their relationship to the children. They are not available to other parents seeking care and they do not operate in the more formal public domain.

Increasingly, however, parents are turning to the formal market place for at least some of the care they need (Hofferth et al., 1991). There are a variety of reasons for this change. In many situations, relatives are simply not available to provide the amount of care that employed parents need. The relatives themselves are in the workforce, making them unavailable or the family does not live close enough to the potentially caregiving relative to make relative care a viable option. In the case of juggling family schedules to provide care, some families are finding the indirect costs of such arrangements unacceptable (Presser, 1992).

Family structures may make informal arrangements unavailable to some working parents. In the case of single-parent households, there is often no other family member in the household to provide care (Marshall & Marx, 1991; Porter, 1991; Siegel & Loman, 1991; Zinsser, 1991). Thus, single female-headed households with children under age 5 and no spouse or partner (the "solo" parent) are the most dependent on market-care (Brayfield, et al., 1993; Emlen & Koren, 1993; Hofferth et al., 1991). Solo female-headed households are also the most likely to be low-income and thus have the most difficulty paying for care. Thus the nature of child care arrangements varies significantly based on the family structure, availability of relatives, and income.

Factors Influencing Parental Choices

Many factors come to play in parents' choice of child care arrangements. Three factors frequently identified in the child care literature are: affordability, accessibility, and quality. Balancing quality, affordability, and accessibility is often referred to as the "trilemma" of child care because most parents rarely can find care that fully satisfies all three factors (Culkin, Morris, & Helburn, 1991; Hofferth & Chaplin, 1994; Willer, 1992). One of the major concerns in the child care field is the extent to which parents are forced into unsatisfactory choices that have adverse impact for them or for their children (Cooper, 1993; Porter, 1991).

Affordability

Since parents are primarily responsible for the costs associated with their child care decisions, the affordability of child care options plays a major role in parental decision-making. The financial cost of care is a major factor in a parent's choice (Hayes et al., 1990; Hofferth & Wissoker, 1992). Although virtually all parents have at least some difficulty paying for child care while they work, affordability is of greater concern for some parents than others (Brayfield et al., 1994; Hayes et al., 1990; Winget, 1982). Overall, families spend an average of 11% of their household income for child care (Culkin et al., 1991; Hofferth et al., 1991). This varies dramatically, however, according to income level, with higher income households paying as little as 2% and low-income households paying as much as 25% (Emlen & Koren, 1993; Hofferth et al., 1991). Thus

affordability is definitely a more critical issue for the working poor than for higher income families.

Accessibility

The National Child Care Study (1991) found that one-half of all three and four year olds are in center-based programs regardless of their mother's employment status. Many families recognize and value the early learning and socialization aspects of pre-school programs (Hofferth et al., 1991) and choose to send their young children to child care. The need for non-parental care while parents pursue work, school or job-training, however, creates the most difficult situation. Working mothers are trying to balance maintaining a household, managing a job and a personal life, and attending to the needs of young children (Googins & Burden, 1987). These women understandably place a high value on the convenience of child care arrangements (Phillips, 1994; Sonenstein & Wolf, 1991). Most parents desire a child care option that is close to work or home, has hours that accommodate a work and/or commuting schedule, or respond to other particular needs such as night or weekend care (Hofferth & Chaplin, 1994; Zinsser, 1991). As with affordability, inaccessible care that is out of the reach of a working parent because of its location or hours of operation does not represent a viable option.

Quality

The quality of a care option is perhaps the most challenging of the three factors in the child care trilemma. The early research into the impact of child care on children's growth and development generally found that there was no significant difference in developmental outcomes between children in child care and children cared for in the home by their mothers (Clarke-Stewart, 1992). This early research, however, was conducted in programs generally considered to be of high quality (Hayes et al., 1990). As the understanding of child care realities increased and as more research was conducted, researchers became concerned because very few children experienced what professionals considered to be quality care (Belsky, 1992). Several major studies found the quality of care in most child care settings mediocre at best (Galinsky et al., 1994; Galinsky, 1995; Galinsky, Howes, & Kontos, 1995; Helburn et al., 1995; Hofferth et al., 1991). In more recent years, the question of quality has been studied carefully and the challenge of increasing the quality of child care is understood in light of the complexities involved.

Characteristics of quality: The researcher's view. Numerous characteristics make up quality and thus, the concept is better understood as a package of attributes, each of which may be of optimal or lesser quality (Meyers, 1993). Over time, early childhood professionals have achieved a high degree of consensus on what are the most significant contributors to quality. Moving beyond global assessments of quality, researchers have identified two general approaches to studying quality in child care: (a) interactive approaches that focus on the child's daily experience in care, in particular the attention

given the child, the relationship with the caregivers, and the learning activities available to the child, and (b) structural aspects that focus on more measurable aspects of the child care environment such as child/staff ratios, group size, space, and caregiver training (Hayes et al., 1990). More often, efforts at assessing quality address the structural aspects because they are more easily measured.

Another dimension of quality that has only recently achieved more research attention is that of stability and continuity of care. Stability is seen as a critical element in terms of the impact on child development (Kelly, 1991; Meyers, 1993; Wolf & Sonenstein, 1991). This dimension is directly related to the cost of care because compensation of early childhood teachers and caregivers has been demonstrated to have a direct impact on turnover in the field (Fuchs & Coleman, 1991). Parental dissatisfaction with child care arrangements also can lead to changing arrangements, thereby affecting stability and continuity (Kelly, 1991; Sonenstein & Wolf, 1991; Wolf, 1991). In cases where the change leads to higher quality, the benefits of the change may outweigh the liabilities.

Characteristics of quality: Parents' views. What role does quality play in parents' child care choices? Research finds that, when asked directly about quality, parents emphasize quality and play down the importance of other factors such as cost and convenience (Helburn et al., 1995; Hofferth & Chaplin, 1994). There is, however, little consensus in the research regarding how parents assess quality. Quality indicators that are important to parents are: a safe environment, supervision, cleanliness, curriculum and practical learning experience, and an understanding, attentive caregiver (Smith, 1991). The relationship between the caregiver and the child is important to parents

(Brayfield et al., 1993; Hofferth & Chaplin, 1994; Kelly, 1991; Sonenstein & Wolf, 1991). Brayfield's analysis of data from the National Child Care Study (1993) found that characteristics of the program offered, such as its emphasis on school preparation, child development, and religious or cultural instruction, were the most significant contributor to parents' attitudes about quality. The age of the child also appears to influence what factors influence parents' assessment of quality (Camaso & Roche, 1991). The location of the child care program and the ratio of children to adults, for example, were significant for parents of children under three but did not predict satisfaction with parents of older children (Sonenstein & Wolf, 1991). Parents do not put much faith in licensing as an indicator of quality although they do care about the health and safety conditions that underlie most licensing standards (Berger & Black, 1992; Hofferth & Chaplin, 1994; Porter, 1991; Zinsser, 1991).

Characteristics of quality: Do parents and researchers disagree? Parents and researchers do not necessarily identify the same characteristics of quality. There is evidence that parents do not value some of the contributors to quality that are highly valued by professionals in the field of early childhood education (Atkinson, 1987; Berger & Black, 1992; Camaso & Roche, 1991; Hofferth & Chaplin, 1994; Lerner & Phillips, 1994; Zinsser, 1992). Parents, for example, do not tend to value training in early childhood development, a characteristic generally cited in the professional literature as having a significant impact on the quality of a child's experience. There is also some evidence that parents substantially overestimate the quality of services their child received. In one national study, parents rated programs as very good while trained observers indicate that most of the same programs provided care that ranged from poor

to mediocre (Helburn et al., 1995). When a closer examination is made of the programs chosen by parents, however, it appears that they have chosen lower quality despite their stated importance of quality (Camaso & Roche, 1991; Cooper, 1993; Galinsky et al., 1995; Helburn et al., 1995; Porter, 1992; Powell & Cosgrove, 1992). The reasons for this apparent discrepancy between parents' views of quality and those of researchers remains unclear (Berger & Black, 1992; Helburn et al., 1995; Meyers, 1993; Sonenstein & Wolf, 1991; Zinsser, 1991).

There are a number of possible explanations :

1. Parents and researchers have different definitions of quality, thus the parent's chosen arrangement is not recognized by researchers as being of quality.
2. Parents may never have seen good-quality care, thus they lack information on which to base their decision and are unable to demand higher quality even though they value it.
3. Parents' choices reflect a trade-off between a number of factors and quality is not the most important in some circumstances. Parents know what the characteristics of quality are but are not able to find or afford quality care.

Many studies examining parents' perceptions of quality make comparison difficult because different studies use different indicators of quality. The National Child Care Study (1991) found that two structural indicators of quality, group size, and teacher training, are not valued by parents (Hofferth & Chaplin, 1994). One study by Families and Work Institute, however, found that parents did value training when it was related to child development (Galinsky, Howes, & Kontos, 1995). There is evidence that parents and researchers agree on the interactive characteristics (caregiver response to the child), however, those characteristics are difficult to measure and thus do not appear in

much of the research on global indicators of quality. Another factor explaining the discrepancy between parental and researcher assessment is that researcher-observers assess quality on aspects of care that may be difficult for parents to observe (Helburn et al., 1995). Caregiver interaction with a child, for example, may be different when the parent is present.

Research has shown that the structural and the interactive aspects of quality are related in that structural aspects such as group size are predictive of interactive aspects such as attention given to the child; they are thus reliable indicators of quality (Hayes et al., 1990; Phillips, 1991; Zaslow, 1991). Parents may not understand, however, how training can affect the caregiver's ability to provide individual attention to a child. Some research finds that parents are decent judges of quality, but they do not identify it in the same way as researchers do (Berger & Black, 1992; Hofferth & Chaplin, 1994; Waite et al., 1991). Results from a recent national study raise concerns about parental perceptions of quality and the value placed on quality, finding that parents paying more for care (and presumably therefore less concerned about affordability) were not choosing higher quality care (Helburn et al., 1995). It appears that there is still a gap between what researchers say and what parents think (Larner & Phillips, 1994).

The dimensions of quality are complex and the question of how to achieve quality in child care settings is difficult. In a system where parents are the primary choosers of child care arrangements, it is essential that we have a better understanding of what will help parents make quality choices for their children's care.

Workplace Flexibility

Flexible work schedules have been identified as a strategy to help working parents balance work and family demands more successfully (Evetts, 1988). The extent to which workplace flexibility helps parents make satisfactory child care choices has been little explored in the research. Neal et al., (1993) found that greater workplace flexibility contributed to reduced absenteeism and stress. Meyers (1993) discussed the likelihood that flexibility plays a role in labor market behaviors but pointed out that there has been little research into its impact on women's employment behaviors. Harriet Presser, in her presidential address to the American Sociological Association (1989) stated that workplace flexibility appears to be "at best" a supplemental strategy for the care of preschool age children. Theoretically, however, it seems that flexibility at the work place could contribute to a parent's ability to make satisfactory child care arrangements.

Trade-offs

The effort to reach a balance between affordability, accessibility, and quality is sometimes framed as a "trade-off" (Cooper, 1993; Hofferth & Chaplin, 1994; Ruopp & Travers, 1992). Virtually no parent achieves an optimal result on each factor, and thereby settles for less on one or another in order to find manageable arrangements. What do we know about the trade-offs parents make in arriving at child care choices? One thing seems clear: no one factor takes precedence for all parents; rather it is the

relative importance of multiple factors that seems to make the difference and it is important to examine the contribution of these multiple factors (Leventhal et al., 1992).

Affordability is important to almost all parents (Hofferth & Wissoker, 1992; Hofferth & Phillips, 1991; Powell & Cosgrove, 1992; Ruopp & Travers, 1982). There is some evidence that families with high and low social economic status are more likely to obtain higher quality than are families with middle incomes (Waite et al., 1991). This is possibly explained by the fact that current policy provides subsidies to low income parents, allowing them access to quality of care that is unavailable to their counterparts in low-income working families ineligible for child care subsidies (Waite et al., 1991). Middle-income families in the United States have little access to financial assistance for child care, yet they may not have sufficient household income to access higher quality care. Federal and state tax credits for dependent care expenses do benefit middle-income families, however, the effect of these tax credits is negligible compared to the yearly cost of care. This is also born out by research that shows lower and middle income families pay a greater proportion of their household income for child care than do upper income families, yet they purchase lower cost care (Emlen, Koren, & Vizzini, 1995).

Within the constraints of affordability that virtually all working families face, it appears, however, that accessibility is also very important. One aspect of accessibility is convenience and a number of studies have found that convenience plays a major role in parental choices (Cheskis-Gold, 1988; Meyers, 1993; Wolf & Sonenstein, 1991; Camaso & Roche, 1991; Porter, 1991). Strong evidence exists for the importance of convenience (Hofferth & Chaplin, 1994; Zinsser, 1991). Most parents live within 30 minutes of their chosen child care arrangement. The further parents live from a type of

care, the less likely they are to use that arrangement. Convenience not only involves geographic location of a child care arrangements, it also includes the hours of operation, flexibility in scheduling, and a number of other characteristics that make it easier or more difficult for parents to access the care.

Quality is especially significant to the well-being of young children since the child in day care may spend more awake time in the presence of the caregiver than with her parents (Kelly, 1991). A major issue, however, is the controversy over whether parents can assess child care quality (Helburn et al., 1995; Kelly, 1991). There seems to be no disagreement that parents desire high quality care for their child; rather it is a matter of difficulty in achieving quality child care arrangements. Many parents who report overall satisfaction with their child care arrangements indicate that they prefer another arrangement. Quality is the most commonly mentioned reason for that preference (Hofferth & Chaplin, 1994; Porter, 1991; Zinsser, 1991). Quality, in and of itself, involves some degree of trade-off because of the various factors that contribute to quality. Parents may feel that the child care setting is safe and clean for example, yet still have concerns about some other aspect of the arrangement. This dilemma leaves parents in a difficult situation: they may have to live with a choice that is less than what they would desire because they must work in order to support the family.

Workplace flexibility may help parents manage the trade-offs between affordability, accessibility, and quality. Research indicates that families under stress seem less able to do the time-consuming research necessary for acquiring high quality child care and that, overall, parents living with less stress are more apt to raise more capable, secure children (Kelly, 1991). Thus, workplace flexibility is yet another

characteristic of the family environment that could contribute to a parent's ability to manage.

One contribution to the gap between parents' stated value on quality and their actual choice of lower quality care arrangements may come from a lack of understanding on the part of researchers as to the factors that impact parental decision making. This calls for a closer examination of the ways parents' decisions about child care arrangements balance out the often competing factors of accessibility, affordability, and quality. The complexity of the situation facing families has been receiving increased attention in recent years. It is now understood that the decisions are not as simple as "whether to work" or "which child care program is best for my child?" The complexities of families' choices regarding child care arrangements can best be understood by taking into consideration the various factors that influence those decisions.

Satisfaction

One way of assessing the impact child care choices have on child and family well-being is by looking at the satisfaction parents have with their child care arrangements. High rates of satisfaction with child care arrangements (96%) were reported in the National Child Care Study (1991), however, 26% of the parents in the study preferred an alternate arrangement. Of the reasons given for preferring an alternative arrangement, quality was named 70% of the time (Brayfield, et al., 1994). Parental dissatisfaction with child care arrangements, while not a direct measure of the

quality of the care, is important because it has been shown to contribute to the decision to change arrangements (Sonenstein & Wolf, 1991). Turnover in child care arrangements affects the child's experience. Researchers have called for more differentiated measures of parental satisfaction in order to gain a better understanding of the criteria used by mothers and fathers in evaluating their child care arrangements (Kelly, 1991; Leventhal et al., 1992). Neal et al., (1993) found that parental satisfaction with child care arrangements was significant in predicting absenteeism and stress in the workplace. In a market-driven system that relies on parental decision making regarding child care arrangements, parental satisfaction is an important factor to consider.

Factors Affecting Parental Satisfaction

As has been demonstrated, the relationship between the factors that affect parental choice of child care arrangements is complex. Parental choice is affected not only by the circumstances within the family but also by economic and social factors in the community. Higher quality care is not really available to parents if they cannot afford it or do not recognize its value. It is also true that although all parents have similar concerns, not all parents have the same resources with which to make decisions. Subsidies to increase the affordability of care are not likely to result in increased quality if that care is not available in the community where parents live and work. There are other factors in the family environment that contribute to the parent(s)' ability to make satisfactory child care choices. In order to get a complete picture of the context within

which families make child care choices, it is important to look at the role that income, family structure, and the child's age play in the process.

Income

While it might seem obvious that income affects parental ability to find satisfactory child care arrangements, the relationship between income level and satisfaction is not always that clear. A recent study shows that higher income parents do not necessarily get higher quality care (Helburn et al., 1995), nor are they necessarily more satisfied with the care they do get. Clearly income should affect the affordability of care and research does bear out that low-income parents do pay less in actual dollars for care than do higher income households (Emlen & Koren, 1993). The proportion of household income paid for child care in low-income households, however, is dramatically greater than in higher income households (Culkin et al., 1991; Hofferth et al., 1991). Neal et al., (1993) found that income made no contribution to reduced stress levels or decreased difficulty in balancing work and family. There is recognition, however, that as stressful, difficult, and time-consuming as it can be for all families to arrange for child care, low-income families face even more challenges (Brayfield et al., 1994; Hayes et al., 1990; Lerner & Phillips, 1994).

Household Structure

The availability of a spouse or partner in the household is another factor that can impact a parent's ability to make satisfactory child care arrangements. We know from a number of studies that working mothers choose household members as primary caregivers (Emlen & Koren, 1993; Porter, 1991; Siegel & Loman, 1991; Veum & Gleason, 1991; Zinsser, 1992). In fact, slightly more than half of US households manage care for their children while they work or attend school without ever turning to the market place. Even households that turn to the market place for care often rely on other family members for primary or secondary arrangements. Solo female parents face increased pressures because they have no other adult to turn to (Emlen et al., 1995; Presser, 1989). In the National Child Care Study (1990), two parent families were more satisfied with their care arrangements than single mothers (Brayfield et al., 1994).

Both of these factors -- income and the presence of a spouse or partner in the household -- can be viewed as resources that an employed mother can draw on in order to make satisfactory child care arrangements. In the case of income, she may have access to a greater range of market options as a result of higher income. With another adult in the household, she may be able to rely less on the market for care and to make arrangements that provide satisfaction.

Age of Child

Another possible contributor to parents' ability to make satisfactory child care arrangements is the age of the child (Leibowitz, Waite, & Witsberger, 1988). Research indicates that parents have different concerns for very young children than they do for older children (Sonnenstein & Wolf, 1991). Care for infants and toddlers has been identified as especially difficult to find and more expensive than care for pre-schoolers (Hofferth & Wissoker, 1992). This may make it more difficult for parents of young children to make satisfactory arrangements.

Summary

Affordability, accessibility, quality, and workplace flexibility are all important factors that influence parental satisfaction with child care choices. Many families make choices that they consider affordable, meet their needs for accessibility, and leave them without concerns about the safety and quality of the care. Other families are less likely to achieve satisfaction and, indeed, settle for care that does not meet their, or their children's, needs or expectations.

The ecology of human development provides an ideal model to understanding the factors that influence parental decision-making about child care arrangements. This approach calls for two levels of analysis: (a) an analysis of the microsystem characteristics of family income, household structure, and age of child which contribute to the resources supporting the family, and (b) an analysis of the exosystem

characteristics of accessibility, affordability, quality and workplace flexibility that shape the environment within which the family operates. No one domain can be seen as operating independently, rather, parental satisfaction can be better understood as a result of the relationships between the two.

A rational choice approach provides a perspective that is useful in understanding how parents actually make child care choices and the role that parental choice plays in efforts to improve the child care system. According to the rational choice approach, parents attempt to achieve the greatest good within the options available. Their efforts are guided by basic preferences and values; they are, however, very much shaped by economic forces, especially those related to the job market. These economic forces often limit the supply of and increase the demand for child care in the community. As parents strive to make child care arrangements that allow them to work, they may feel compelled to choose arrangements that do not meet all of their basic preferences. As a result, they may be satisfied overall and still have concerns about specific aspects of the chosen arrangement. The child care system in the United States is also market-based, thus, the choices of parents as consumers in that marketplace are important factors in efforts to improve that system.

Employed parents face real challenges in finding child care arrangements with which they are satisfied. The necessity of arranging for supplemental care has grown as women's workforce participation has increased over the last two decades, yet support for these employed mothers has not grown accordingly. In many cases, employed parents' labor force participation is driven by economic necessity. In all cases,

regardless of income, they struggle to make choices that balance their need for affordable, accessible care that also meets their standards for quality.

Much of the research on child care choices has focused on low-income mothers in conjunction with public interest in reducing welfare dependency. The data that is available on broad samples of the population indicate that these low-income parents are not so different from their higher income counterparts (Porter, 1991; Zinsser, 1991). Researchers frequently look at the kinds of choices parents make within the context of the formal child care system, yet most parents rely on informal and family sources of care while they work or attend school. The choice for informal or family sources of care is often motivated by the parents' basic preference for care by family members. It is also, however, often motivated by economic considerations that lead parents to supplement more expensive, formal care, with less costly informal arrangements. While all employed parents must make choices that meet their need for affordable, accessible, quality child care arrangements, not all families' choices are the same, and not all families have the same resources to help them make satisfactory arrangements. Many factors contribute to the family's ability to make satisfactory choices.

This exploratory study will look at a sample of employed mothers with children under age 13, using the full range of child care arrangements. The study will examine how exosystem characteristics, including parents' views of affordability, accessibility, workplace flexibility, and their concerns about the quality of care arrangements, impact overall satisfaction with child care arrangements. Research indicates, however, that these characteristics are interrelated; and it is in the interaction between these characteristics that the most interesting results will be found (Jaccard, Turrissi, &

Wan,1990; Kelly, 1991). Thus, the study will explore how parents' perceptions of accessibility, affordability, quality, and workplace flexibility interact to predict satisfaction. The research will also explore the effect of microsystem characteristics on parental satisfaction with child care arrangements. Finally, the research will explore the combined effect of microsystem and exosystem characteristics on parental satisfaction with child care arrangements.

CHAPTER THREE

METHODOLOGY

Through a secondary analysis of data on the child care arrangements of employed mothers, this exploratory study increases understanding of the complex circumstances affecting the child care decisions of employed mothers and their perceptions about those choices.

The questions that guided this research were:

1. To what extent do exosystem characteristics, including parental perceptions of affordability, accessibility, quality of the child care arrangements for the youngest child, and workplace flexibility, independently affect overall parental satisfaction with child care arrangements?
2. How do accessibility, affordability, quality, and workplace flexibility interact with each other to affect overall parental satisfaction with child care arrangements?
3. How do microsystem characteristics of household income, household type, and stage of family development (as measured by age of youngest child) independently impact overall parental satisfaction with child care arrangements?
4. How do household income, household type, and child's age interact to impact overall parental satisfaction with child care arrangements?
5. How do exosystem characteristics interact with microsystem characteristics to impact overall parental satisfaction with child care arrangements?

Source of Data

Data for this study were drawn from a 1990 survey of employees at 15 businesses in Lane County, Oregon for which the author managed the data collection. The survey was conducted by Arthur Emlen and Associates for employers interested in developing child care options for their employees. The employee survey was carried out in partnership with the Regional Research Institute for Human Services at Portland State University. Although the data were collected in 1990, there were no significant changes in the availability of child care assistance or in the services available to parents to help them manage child care decisions in the time period between 1990 when the data were collected and 1996 when these analyses were performed. The percentage of households in the county with lower and middle incomes declined considerably between 1990 and 1994 as is shown by Table 3.1. The percentage of families with very low incomes increased slightly and the percentage of households with incomes above \$45,000 increased considerably. Thus, while the percentage of Oregon households living under the poverty level declined, the percentage of households with very low incomes did not (Oregon Population Survey, 1990 and 1994).

Subjects

The source of the sample is a strength. Most studies on caregiving use samples derived from users of formal, often subsidized, services and underrepresents those who rely on informal sources, such as family and friends (Neal et al., 1993). The current

study was derived from an employee population that represented the full range of types of caregiving situations. As Neal (1993) has noted, "This sampling approach better represents the needs of the population rather than the solutions adopted by a few" (p. 36).

A total of 3280 employees completed the Lane County employee survey. Table 3.2 shows the breakdown of male and female employees and the number of each who are parents of children under age 13.

Table 3.1. Household income and poverty data for Lane County, Oregon, 1990 and 1994.

Household Income	1990	1994
less than \$15,000	21.3%	22.5%
\$15-\$25,000	26.2%	13.4%
\$25-\$45,000	36.9%	27.4%
more than \$45,000	15.6%	36.7%
Poverty Level	1990	1994
households below poverty level	12.5%	6.2%
children under 9 below poverty level	11.5%	7.7%

Data from Oregon Population Survey, 1990 and 1994

Table 3.2. Parental status of male and female employees in total survey sample.

	Parent with child < age 13	Non-parent or child > age 13	TOTAL
MALE	494	892	1386
FEMALE	642	1252	1894
TOTAL	1136	2144	3280

Several groups were not selected for the study:

1. Male (n=735) and female (n=1061) employees with no children under 18.
2. Mothers with no children under age 13 (n=191). The use of paid care drops off sharply at age 12 and current public policy limits most child care programs and services to families with children under age 13 .
3. Employed mothers with a spouse or partner who is not employed. These women (n=19) reported that their spouse either shared in or took most responsibility for child care arrangements.
4. Male single parents. A subject of interest, but in this sample there were too few (n=17) for purposes of analysis.
5. Other male parents (n=397). The survey collected data from all employees. The questions included in this study are most relevant to the parent who actually makes most of the child care decisions in the household. In this survey, these subjects indicated that their spouse or partner handled most or all of the child care responsibilities; thus, they were not included in this study. Excluding these sub-groups resulted in a sample of 642 female employees with children under age 13 in the home.

Relatively few women in this sample were from low income households. Only 4.5% reported household incomes of below \$15,000 which roughly corresponds to federal poverty level for a household of four in 1990. The typical woman in this study was in her mid-thirties with two children, both of whom were school age. She had a spouse or partner in the home and between them they earned \$40,000 a year. Table 3.3 presents the demographic characteristics of the women in this study.

Table 3.3. Demographic characteristics of study sample.

Average age	35.1 years
Average number of children	1.6
Average age if youngest child	6.3
Percent of youngest children under age six	40%
Percent of youngest children age six and older	60%
Percent of women with no spouse or partner in household	18.2%
Household income	\$40,000
Average hours worked per week	32.4
Percent of women with spouse or partner present with incomes below \$15,000 a year	2%
Percent of women with no spouse or partner present with incomes below \$15,000 a year	26.9%
Percent of mothers who report working full-time	49%

The economic status of the women in the sample is less favorable when the women's wages alone are considered or when women without a spouse or partner in the home are examined. Nearly 19% of the women in the study reported personal incomes below \$15,000. In the case of women without a spouse or partner, 28% reported personal incomes below \$15,000 a year. Although only 117 women in the study reported no spouse or partner in the home, the differences between these "solo" female headed households and their counterparts are of interest in this study.

Instrument and Data Collection

The survey instrument was developed as part of an ongoing series of research projects on dependent care conducted by Arthur Emlen. The basic format was the same as for all projects, with specific adaptations made for the employer or organization contracting for the study. Questions were added to the Lane County survey to ascertain employee utilization of child care referral services.

Data for this study were collected from all employees of the 15 participating companies and agencies. These businesses represented a variety of government services, health care workers, the timber industry and several retail service businesses. The personnel department or executive officers of each company worked with the researcher to identify the conditions most likely to result in a high return. Employees were informed that their responses would be used by their employer and by community agencies working to address child care concerns in the community. Employees were given work time to complete the survey and questionnaires were returned directly to the researcher for compilation. Responses could not be traced to individual employees. The return rates ranged from 25% to 100% with a median return rate of 71% for participating organizations and an overall return rate of 52%. Two factors affected the return rate. The first is that all employees were included in the survey, however, it is likely that employees without dependents and companies with a small female workforce would be less likely to return the surveys than those companies with a larger female workforce. The company with the lowest return rate (25%) was a lumber company with relatively few female employees. Participation by staff in the administrative unit of this

employer, which is mostly female, was 75%. The overall return rate in the study was diminished somewhat by virtue of the fact that this employer was also in the midst of a labor dispute at the time the survey was conducted.

Variables

The study utilized variables representing the following concepts: (a) Affordability, (b) Accessibility, (c) Quality, (d) Workplace Flexibility , (e) Household Income, (f) Household Type, (g) Age of youngest child, and (h) Overall satisfaction with child care arrangements. Table 3.4 describes these concepts, the indicators used to measure them, and the methods of variable construction.

Table 3.4. Construction of exosystem, microsystem, and dependent variables for the study.

EXOSYSTEM CHARACTERISTICS		
CONCEPT	INDICATORS	VARIABLE CONSTRUCTION
<p>Accessibility is a combination of factors that differ according to family circumstances and preferences. Generally discussed as convenience, there are two different aspects of accessibility: (a) Distance: the actual distance a care option is from home, additional travel time required and general perception that the child care is too far from home, and (b) Difficulty: the reported difficulty finding child care which is a component of accessibility including other factors than distance.</p>	<p>Employee responses to four questions:</p> <p>1) How easy or difficult has it been to find child care arrangements? (Q 38)</p> <p>2) Response to "Child care is too far from home" (Q 31.2)</p> <p>3) About how much extra time(minutes) does your travel for child care add to your daily round trip travel time to and from work? (Q35)</p> <p>4) How far is your child care arrangement from your home?(Q29 and 30)</p>	<p>DIFFIND: 1= very easy to 6= very difficult.</p> <p>CGFARHM: 0= not checked to 1= checked</p> <p>XTRATIME: Number of extra minutes</p> <p>DISTANCE: 1= next door to 9= more than 8 miles.</p>
<p>Affordability is generally recognized as a significant factor affecting parental choice of child care. Measures of affordability are more difficult to determine. What one family considers affordable another would not. It is a matter of individual family circumstances and values that affect whether a parent considers care affordable</p>	<p>Employee responses to three questions:</p> <p>1: What is your annual household income? (Q18)</p> <p>2. How much does child care cost you per month? (Q40)</p> <p>3. How easy or difficult has it been to pay for child care arrangements?</p>	<p>PERCENT: Percentage of household income paid for child care is calculated by dividing the monthly amount paid for child care (X12) by the midpoint of the range of household income .</p> <p>DIFFPAY: 1= very easy to 6= very difficult</p>

Table 3.4. (continued)

<p>Quality: a combination of factors usually regarded as <u>structural</u> (pertaining to characteristics of the child care setting such as space, group size, child/staff ratios) or <u>interactive</u> (pertaining to the relationship between the caregiver and the child, the nature of the program, and other more qualitative aspects of the child's experience).</p>	<p>Parental concerns about quality were assessed by responses to the question: "What things do you dislike (if any) about your current child care arrangements? (Q31)</p> <p>1) don't like the program 2) don't like the caregiver 3) too many kids 4) worried about safety 5) too dirty or unsanitary</p>	<p>All responses are coded as 0= not checked , 1= checked</p> <p>STRUCTUR: Sum responses to items #4 and #5.(total possible score =2).</p> <p>INTERACT: Sum responses to items #1, # 2, #3, (total possible score= 3).</p> <p>GLOQUAL: Sum responses to items #1 through #5.(total possible score=5)</p>
<p>Workplace flexibility contributes to stress and ability to manage child care arrangements. Presumably, increased flexibility would contribute to parents ability to make satisfactory child care arrangements.</p>	<p>Employee response to two questions:</p> <p>1) How much flexibility do you have in your work schedule to handle family responsibilities? (Q13)</p> <p>2) To what extent do the management practices in your department, branch or office make it easy or difficult for you to deal with child care problems during work hours? (Q 37)</p>	<p>FLEX: 1= a lot of flexibility to 4= no flexibility</p> <p>DIFFPP 1= very easy to 6= very difficult</p>
MICROSYSTEM CHARACTERISTICS		
CONCEPT	INDICATORS	VARIABLE CONSTRUCTION
<p>Household Type: The presence of a spouse or partner is an important factor affecting child care arrangements. Single "solo" parents are most dependent on paid child care arrangements.</p>	<p>Employee response to question: "Do you have a spouse or partner who lives in your household? (Q14)</p>	<p>SPOUSE: 0= spouse or partner 1= no spouse or partner</p>

Table 3.4. (continued)

Income is a major factor impacting parents' choice of child care arrangements. The constraints faced by low income families are considerable, however, it is a difficulty faced by most families.	Employee response to question: "What is the approximate annual gross income of your household? (Q18)	INCOME: Responses to the question are coded as $1 \leq \$10,000$ to $10 \geq \$70,000$. The variable is recoded as $1 \geq \$70,000$ to $10 \leq \$10,000$ so as to be more consistent with other variables in the analysis.
Age of child is important as parents face different constraints, depending on where they are in the family cycle. Research indicates that parents have different concerns about child care according to the age of the child in care and vary their choices accordingly.	Employee response to the question: What are the ages (years) of the children under 18 living in your household? (Q 25)	KIDAGE1 =age (in years) of youngest child.
DEPENDENT VARIABLE		
CONCEPT	INDICATOR	VARIABLE CONSTRUCTION
Satisfaction is not necessarily an indicator of quality, although parental perceptions of quality do contribute to satisfaction. Satisfaction does, however, contribute to the kinds of choices parents make and the stability of those arrangements which has been shown to contribute to child well-being and parental employment.	Employee response to the question: "How satisfied are you with the child care arrangements or combination of arrangements for your youngest child? (Q 27)	SAT1 responses coded as 1= very satisfied to 5= very dissatisfied.

Methods of Analysis

Stage One. The first stage of the analysis was to determine the indicator for microsystem and exosystem concepts that best represent the concept in accounting for parents' satisfaction with child care arrangements. The microsystem indicators for household type, age of youngest child, and income needed no further refinement for use in the second stage of analysis. This was done as follows for each concept:

Exosystem Concepts

1. Accessibility: The indicators of distance (distance child care is from home, child care arrangement is too far from home and the extra time it adds to work travel to go to child care) were entered into a multiple regression. The variable, difficulty finding child care, was retained as a separate variable during this stage because it measured more than distance. After initial analyses, difficulty finding child care was retained as the indicator for accessibility.
2. Affordability: The possible indicators of affordability (percentage of household income and difficulty paying for child care) were entered into a multiple regression and the indicator that accounted for the most variance in parental satisfaction, percentage of household income paid for child care, was selected to measure affordability.
3. Quality: Correlation coefficients were calculated for the five concerns about quality (program, caregiver, number of children, safety, and sanitation) in order to create a scale to measure parental concerns about quality. Grouping the components to measure

similar concepts, sub-scales for Safety, Interaction, and Overall concerns about quality were computed. These sub-scale scores were entered into a multiple regression equation to determine which one accounted for the most variance in parental satisfaction. The scale for overall concerns about quality was then used as the indicator for quality in subsequent analyses.

4. Flexibility: The two indicators of workplace flexibility (difficulty with personnel practices and flexibility to handle child care arrangements) were entered into a multiple regression equation to determine which one accounted for the greatest amount of variance in parental satisfaction. Difficulty with personnel practices was then used as the indicator for workplace flexibility. Table 3.5 shows the variables examined for inclusion in the analysis and the R^2 for each. This was the basis on which a variable was selected as the indicator for concepts of accessibility, affordability, quality, and workplace flexibility.

Table 3.5. Results from simple regression used to select indicators of accessibility, affordability, quality, and workplace flexibility for subsequent analyses. (The variable selected for subsequent analysis is indicated in bold type.)

CONCEPT	INDICATOR VARIABLE	R^2 and Significance*
ACCESSIBILITY	Distance traveled to child care arrangement from home	.002
	Child care is too far from home	.001
	Extra time required to travel to child care arrangement	.0002
	Difficulty finding child care	.077****
AFFORDABILITY	Percentage of household income paid for child care	.013***
	Difficulty paying for child care	.009*

Table 3.5 (continued)

CONCEPT	INDICATOR VARIABLE	R ² and Significance*
QUALITY	Safety: (safety, dirty conditions, number of children, and the caregiver)	.063****
	Interaction: Concerns about program	.006*
	Global: Overall concerns about quality	.068****
WORKPLACE FLEXIBILITY	Difficulty with personnel practices	.028****
	Flexibility to handle child care arrangements	.015***

*p<.05

**p<.01

***p<.001

****p<.0001

Stage Two. The second stage of analysis looked at the combined effect of exo- and microsystem characteristics on parental satisfaction with child care arrangements. This was done as follows for each sub-system.

Exosystem Concepts

This phase of the second stage analysis explored the contributions of accessibility, affordability, quality, and workplace flexibility to parental satisfaction. Based on the results of simple regression analysis done in stage one, the indicators for accessibility, affordability, quality, and workplace flexibility were entered into a multiple regression equation to see the relative effect of each on parental satisfaction with child care arrangements. In order to better test the model of exosystem effects on parental satisfaction, the same variables were also used in a stepwise multiple regression

equation in order to determine which variable contributed the most variance in parental satisfaction. Examining the same variables with different procedures is helpful in developing the best model (Norusis,1993).

Microsystem Concepts

This phase of the second stage analysis explored the contributions of household income, household structure, and age of youngest child to parental satisfaction. The indicators for income, household structure, and age of youngest child were entered into a multiple regression equation to see the relative effect of each on parental satisfaction with child care arrangements.

Stage Three. The third phase of analysis explored the contributions to parental satisfaction made by exosystem characteristics when microsystem characteristics are taken into consideration. This was done with multiple regression using the exosystem and microsystem indicators selected in previous analyses.

Since the primary interest of this study is in the public policy implications of factors impacting parental satisfaction with child care, an additional stage of data analysis was included in the study. In order to look more closely at groups that have particular interest to the public policy arena, the sample was divided into groups according to the percentage of household income spent on child care. These three groups were: (a) mothers paying nothing, (b) mothers paying between one and 12% of their household income for child care, and (c) mothers paying more than 12% of their household income for child care. The exosystem variables were then entered into a

multiple regression equation with parental satisfaction as the dependent variable to explore the differences between groups when affordability is taken into account. Further examination of these groups involved comparing the means of the three groups on the following variables: (a) dissatisfaction with child care arrangements, (b) affordability, (c) concerns about quality, (d) workplace flexibility, (e) difficulty finding child care, (f) household income, (g) age of youngest child, (h) number of children under age 13, (i) hours per week in child care center, family day care, home with a spouse or partner, care with a sitter and care with a relative, and (j) monthly cost of child care. These results provide a picture of the ways these working mothers manage to care for their children while they are employed and an increased understanding of how they feel about it.

This exploratory analysis helps develop an understanding of the contributions of income, household structure, age of child, and perceptions of accessibility, affordability, and quality to parental satisfaction with child care arrangements. The model, however, usually fits the sample from which it is derived better than it fits the population (SPSS Manual, p. 121). It will be of value to apply these results from this study to other populations in future research. The results of this study will also contribute to greater understanding of the balance that employed mothers strike between different, but important, factors that influence their child care choices.

CHAPTER FOUR

THINGS ARE NOT AS SIMPLE AS THEY MIGHT SEEM!

Employed mothers face numerous decisions as they enter the workforce. Many women who enter the workforce do so because of economic necessity; however, that decision in itself is mediated by a number of influences. Women weigh the opportunity costs of staying out of the workforce against the costs associated with workforce participation. Rarely do they have the option of a relatively simple decision of whether to work outside the home or not, or which child care provider they will employ for their child. They weigh the job requirements, the wages offered, the impact on children of outside the home employment, and the preferences of a spouse or partner in making their decisions about employment. The well-being of their children is another factor taken into consideration, and ultimately mothers' satisfaction with the child care arrangements facilitates their work which contributes to child well-being.

Results of the Analysis

In order to set the context for reporting the results of this exploratory study, it is helpful to know more about the child care arrangements of employed mothers in the study. Like most families, these mothers relied on a number of different child care arrangements for their children while they worked. The choices were similar to those made by parents in other studies (Brayfield et al., 1993; Hofferth et al., 1990; and Neal et al., 1993). Although half of them worked full time, they did not rely on the formal

child care market for their children during all of those hours. Table 4.1 gives the average number of hours spent in each type of child care arrangement for the youngest child in the household and the average amount paid for that care. Nearly one-third (31%) of the women in this study reported paying nothing for child care. For those mothers paying for child care, the average monthly payment for child care for all children in the household was \$216.

Table 4.1. Average number of hours and monthly cost of different child care arrangements for the youngest child.

TYPE OF CARE	AVERAGE HOURS PER WEEK	AVERAGE COST PER MONTH
Family Day Care	14.10	\$85.35
Home care by non-relative	3.99	\$24.06
Home care by relative	4.18	not available
Home care by sibling	3.50	not available
Home with sitter	1.06	not available
Home with spouse	12.80	not available
Child Care Center	14.60	\$85.83
Relative's home	5.85	\$9.06
Self-care	4.35	not available

A comparison of women with lower incomes and no spouse or partner to co-workers who have a spouse or partner and higher incomes illustrates differences between these women. Table 4.2 gives the monthly cost and percentage of household

income paid for child care for women according to household income and presence of a spouse or partner.

Table 4.2. Monthly cost and percentage of household income paid for child care by total household income and presence of a spouse or partner.

Comparison of monthly cost of child care and percentage of household income	Household Income < \$25,000 n=134	Household Income ≥ \$25,000 n=506
Women with spouse or partner n=525	Monthly cost = \$78.40 Percentage = 6% n=67	Monthly cost = \$154.05 Percentage = 4% n=458
Women with no spouse or partner n=115	Monthly cost = \$128.27 Percentage = 11% n=67	Monthly cost = \$246.02 Percentage = 9% n=48

Perceptions of Child Care Arrangements

Overall concerns: These mothers expressed concerns about many different aspects of their child care arrangement (Table 4.3). Relatively few women (26%) liked everything about their child care arrangement. The most common concerns were costs and safety.

Overall Satisfaction

Although more than one-half (54%) of the mothers responding indicated overall satisfaction with their child care arrangements, on a global satisfaction measure, only

26% liked everything about their child care arrangement (Table 4.3). Nearly 36% of the women in this study reported mixed feelings about their child care arrangements.

Twenty-six percent of the mothers in this study had changed their child care arrangements for the youngest child more than twice in the past year. Many of these women are less than fully satisfied with their current child care arrangements as well.

Table 4.3. Employed women's concerns about child care arrangements.

Concern	# of respondents	percentage of total*
I like everything	82	26%
Child care costs too much	131	20%
Concerns about safety	128	20%
Too many kids	82	13%
Too far from home	77	12%
Concerns about the program	17	3%
Don't like the caregiver	16	2%
Too dirty	8	1%

*Total is more than 100% because respondents answered more than once

When income level and household structure are considered, the differences in satisfaction between the women in the study become clearer. Women without a spouse or partner and a household income of less than \$25,000 were significantly less satisfied

(3.08) than women with a spouse or partner and a household income greater than \$25,000 (2.23) (Table 4.4).

Table 4.4. Satisfaction with child care arrangements by total household income and presence of a spouse or partner.

Comparison of levels of satisfaction with care for youngest child *	Household Income < \$25,000 n=134	Household Income ≥ \$25,000 n=506
Women with spouse or partner n=525	2.49 n=67	2.23 n=458
Women with no spouse or partner n=115	3.08 n=67	2.63 n=48

1= very satisfied

2= satisfied

3= mixed feelings

4= somewhat unsatisfied or very unsatisfied

Regarding other factors of interest in this study, many (65%) employed mothers in this study found it somewhat or very difficult finding child care and more than one-third (35%) found it somewhat or very difficult to pay for child care. Twenty percent of the mothers reported that their child care arrangements cost too much. The majority (74%) reported management practices at work that provided some to a lot of flexibility for managing child care responsibilities.

The Research Questions and Results

The next section describes the research questions, the statistical methods used to answer them, and the results of the analyses for each question. Most of the analyses use multiple regression to examine the data. Multiple regression analysis provides a method whereby the contribution of each characteristic can be measured as well as the combined contribution of all four characteristics. The contribution of the individual variables and of the combined variables is measured by the coefficient of determination (R^2) which is the amount of variability in the dependent variable accounted for by the independent variable(s). Multiple regression also offers a means whereby the relative importance of independent variables can be assessed. This is done by comparing the regression coefficient (Beta) to determine the relative contribution of each independent variable. Using multiple regression allows for examination of the exosystem variables while controlling for the effect of microsystem variables in the study. SPSS for Windows was the statistical software package used for all analyses in this study.

Question 1: To what extent do exosystem characteristics of accessibility, affordability, quality, and workplace flexibility independently contribute to overall parental satisfaction with child care arrangements?

The purpose of these analyses is to see how well the data available in this study fit with the ecological model described in Chapter One. This research question deals with the independent contribution of exosystem characteristics to parental satisfaction. The first step in a regression analysis is to establish the correlation between the independent and dependent variables.

Results: The correlation matrix for the exosystem variables is shown in Table 4.5. Although all the exosystem variables correlate significantly with the dependent variable of interest in the study, satisfaction with child care arrangements, the exosystem variables with the strongest correlation are accessibility (.28) and quality (.26). The highest correlation overall is between workplace flexibility and accessibility (.43).

Table 4.5. Correlation matrix for exosystem variables for the total sample (n=642).

Exosystem variables	Satisfaction with child care arrangements	Accessibility	Affordability	Quality	Workplace Flexibility
Satisfaction	1.00				
Accessibility	.2778 p=.0001	1.00			
Affordability	.1152 p=.004	.1787 p=.0001	1.00		
Quality	.2611 p=.0001	.1927 p=.0001	.0869 p=.027	1.00	
Workplace Flexibility	.1686 p=.0001	.4277 p=.0001	.0641 p=.107	.1145 p=.004	1.00

Each of the exosystem variables was regressed on parental satisfaction with child care arrangements in a simple regression equation to assess the extent to which each independently contributes to the variance in satisfaction. While statistically

significant, the adjusted R^2 for each exosystem variable shows very little contribution for each individual characteristic to parental satisfaction (Table 4.6).

Table 4.6. Independent contributions of accessibility, affordability, quality, and workplace flexibility to parental satisfaction with child care arrangements for all mothers in the sample ($n=642$).

Variable	b	Beta	p value	Adjusted R^2
accessibility	.236832	.277827	.00001	.076
quality	.469859	.261127	.00001	.067
workplace flexibility	.146415	.168577	.00001	.027
affordability	1.902547	.115227	.0039	.012

Question 2: To what extent do microsystem characteristics of household income, household structure, and age of child independently impact overall parental satisfaction with child care arrangements?

Results: As with exosystem characteristics, microsystem characteristics of household structure, household income, and age of child were entered into simple regression equations to examine their contribution to parental satisfaction with child care arrangements. The results (Table 4.7) show even less contribution to satisfaction by microsystem variables than those shown for exosystem variables (Table 4.6). Nevertheless, each microsystem variable made a significant, although very small, contribution to satisfaction.

Table 4.7. Independent contributions of household income, household structure, and age of child to parental satisfaction with child care arrangements for all mothers in the sample (n=642).

Variable	b	Beta	p value	Adjusted R ²
household structure	.620937	.201996	.00001	.04
household income	.104401	.19035	.00001	.035
child's age	.022854	.080025	.0447	.005

Question 3: How do exosystem characteristics combine to affect overall parental satisfaction with child care arrangements?

Results: This question looks at the relative importance of independent variables by entering the exosystem characteristics of accessibility, affordability, quality, and workplace flexibility into a multiple regression equation with parental satisfaction as the dependent variable. With SPSS there are three ways (stepwise, forward, and backward) in which this can be done in an effort to build the model. Although these procedures do not always result in the same equation, it is encouraging when they do (Norussis, 1993). In these analyses, stepwise method was used. Stepwise enters the variable most highly correlated with the dependent variable in the first step of the procedure. If the variable meets the criterion for entry ($p=.05$) the second variable is selected based on the highest partial correlation. At each step, variables already entered into the equation are examined for removal. If the variables in the equation do not meet the criterion for removal ($p\geq .10$) they remain. All independent variables are examined for entry and removal in the process until the procedure is complete. Those independent variables that

have met these criteria remain in the equation and the resulting R^2 is predictive of their combined contribution to the dependent variable. The relative contribution of the variables in the equation can be determined by comparing the regression coefficient (Beta score) and is, thus, an indicator of the tradeoffs that are of interest in this study.

Using a stepwise procedure to examine the contribution of exosystem variables to parental satisfaction reveals that only two variables, quality and accessibility, remain in the equation. The other two characteristics, affordability and flexibility, are not included in the equation because the probability of t exceeds the criterion for inclusion (Table 4.8). The combined effect of accessibility and quality accounts for 11.6% in the variance of parental satisfaction with child care arrangements. The regression coefficients of accessibility and quality are essentially the same, demonstrating the balance between these two exosystem characteristics achieved by the mothers in the study and their relatively equal contribution to satisfaction.

Table 4.8. Combined exosystem contribution to parental satisfaction with child care arrangements for all mothers in the sample ($n=642$).*

Variable	b	Beta	p value	Adjusted R^2 for all variables in equation
Accessibility	.194250	.229117	.00001	.116
Quality	.389352	.218871	.00001	

*For the purposes of testing the model, all three procedures available on SPSS were applied to the regression of the exosystem variables on satisfaction with no difference in results.

Question 4: How do microsystem characteristics combine to affect overall parental satisfaction with child care arrangements?

Results: As with exosystem variables, it is possible to examine the effects of microsystem characteristics using stepwise multiple regression. In this analysis, only spouse and income account for a statistically significant amount of the variation in parental satisfaction with child care arrangements (Table 4.9). The low R^2 (.049) for the combined microsystem effect on parental satisfaction, despite the statistical significance, indicates a negligible combined contribution on the part of microsystem variables.

Table 4.9. Combined microsystem contribution to parental satisfaction with child care arrangements for all women in the sample (n=642).

Variable	b	Beta	p value	Adjusted R^2 for all variables in the equation
household income	.066305	.120913	.0072	
household structure	.438011	.142293	.0016	.049

Question 5: How do exosystem characteristics combine with microsystem characteristics to impact overall parental satisfaction with child care arrangements?

Results: Stepwise multiple regression was used to test the combined effects of the micro- and exosystems and their contribution to parental satisfaction with child care arrangements. Each microsystem variable was entered into the equation with the four

exosystem variables using satisfaction with child care arrangements as the dependent variable. A large change in R^2 indicates that a variable provides unique information about the dependent variable that is not available from the other independent variables in the equation (Norussis, 1993). As can be seen from Tables 4.10.a, b, and c the presence of a spouse and household income combine with accessibility and quality to make a greater contribution to parental satisfaction than the age of the youngest child. Table 4.10.c illustrates the impact of the child's age as it is the only equation where affordability meets the criteria for inclusion. This suggests the importance of considering the higher cost of child care for pre-school age children. In none of the analyses did workplace flexibility meet the criterion for inclusion in the regression equation. (The full report of the multiple regression analysis used for these tables is included in the appendices.)

Table 4.10.a. Effect of presence of a spouse or partner on the contribution of affordability, accessibility, quality, and flexibility to parental satisfaction with child care arrangements for all mothers in the sample (n=642).

<u>Exosystem</u>				<u>Exosystem + microsystem</u>			
Variable	Beta	p value	R^2	Variable	Beta	p value	R^2
Access	.229117	.00001	.116	Access	.203742	.00001	.143
Quality	.218871	.00001		Quality	.219884	.00001	
				Spouse	.170188	.00001	

Table 4.10.b. Effect of income on the contribution of affordability, accessibility, quality, and flexibility to parental satisfaction with child care arrangements for all mothers in the sample (n=642).

<u>Exosystem variables</u>				<u>Exosystem + microsystem</u>			
Variable	Beta	p value	R ²	Variable	Beta	p value	R ²
Access	.227163	.00001		Access	.210440	.00001	
Quality	.219011	.00001		Quality	.213881	.00001	
			.116	Income	.150257	.0001	.137

Table 4.10.c. Effect of age of the youngest child on the contribution of affordability, accessibility, quality, and flexibility to parental satisfaction with child care arrangements for all mothers in the sample (n=642).

<u>Exosystem variables</u>				<u>Exosystem + microsystem</u>			
Variable	Beta	p value	R ²	Variable	Beta	p value	R ²
Access	.229177	.00001		Access	.211814	.00001	
Quality	.218871	.00001	.1164	Quality	.216891	.00001	
				Age of child	.136846	.0007	
				Affordability	.111412	.0065	.134

Of the exosystem variables (affordability, accessibility, quality, and workplace flexibility), all but workplace flexibility have some impact on parental satisfaction. None of them alone, however, makes a remarkable contribution. The relative contribution of each, however, provides additional understanding of how parents balance out the importance of several factors related to their satisfaction.

A Closer Look

Although interesting, the combined effect of exo- and microsystem characteristics leaves a great deal of unexplained variance in parental satisfaction. A subsequent exploration of the data from these employed mothers found differences that are of interest to policy makers despite the lack of predictive significance. Differences among mothers that are obscured by the size of the sample and the distribution on the variables are more clearly revealed by examining sub-groups of the women in the sample.

The sample was divided into three groups: (a) women who report paying nothing for child care, (b) women who pay less than 12% of their household income for child care, and (c) women who pay 12% or more of their household income for child care. The cut-off at 0% and 12% encompasses cases one standard deviation from the mean for percentage of household income paid for child care.

Tables 4.11.a, b, and c compare these groups on the exosystem and microsystem variables, as well as on other variables that describe their child care arrangements. A one-way analysis of variance was used to determine the significance of the differences between the means of the three groups. This method tells us that, with 95% confidence, there are differences in the means of the three groups but it does not tell us which pairs in the groups differ. By applying a post hoc comparison of means, it is possible to determine which groups differ. The Bonferroni test of least significance difference was used to explore the intergroup differences. Pairs that are different at the .05 level after the Bonferroni correction is made are considered to differ significantly (Norussis, 1993).

The overall differences between groups on the variables are shown in Table 4.11.a and b and between group significance is shown in Table 4.11.c.

Table 4.11.a. Means of exosystem and microsystem variables for three groups of mothers: Mothers not paying for child care, mothers paying less than 12% of household income for child care, and mothers paying more than 12% of household income for child care.

	Group I Not Paying n=200		Group II Paying <12% of household income n=362		Group III Paying ≥12% of household income n=83		
Variable	Mean	S.D.	Mean	S.D.	Mean	S.D.	p value
1. Dissatisfaction with child care arrangements	2.46	1.28	2.26	1.03	2.7	1.51	.004
2. Percentage of household income paid for child care	.00	.00	.05	.03	.20	.12	.00001
3. Concerns about quality	.31	.50	.40	.69	.52	.82	.04
4. Little workplace Flexibility	2.77	1.38	3.16	1.36	3.24	1.40	.003
5. Difficulty finding child care	3.74	1.55	3.93	1.29	4.53	1.38	.0001
6. Percent with spouse or partner	80.5%		89.8%		51.8%		.00001
7. Household income	\$37,166	\$16,792	\$44,952	\$16,036	\$27,650	\$15,442	.0001
8. Age of youngest child	9.38	3.84	5.01	3.62	4.42	3.73	.0001
9. Number of children <13	1.63	.78	1.61	.81	1.71	.97	n.s.

Values of variables:

1. Satisfaction:	1= very satisfied, 5= very dissatisfied
2. Affordability:	percentage of household income paid for child care
3. Quality:	0= no concerns, 5= most concerns
4. Flexibility:	1= great deal, 6= none
5. Accessibility:	1= easy, 6= very difficult
7. Age in years	

Table 4.11.b. Average hours per week and monthly cost of child care arrangements for three groups of mothers according to percentage of household income paid for child care.

	Group I Not Paying N=200		Group II Paying <12% of household income N=362		Group III Paying >12% of household income N=83		
Variable	Mean	S.D.	Mean	S.D.	Mean	S.D.	p value
hours per week in child care center	.14	.85	16.11	16.12	24.16	18.64	.0001
hours per week in family day care	.53	2.21	15.98	14.85	21.31	19.28	.0001
hours per week home with spouse	15.27	15.01	11.8	11.16	6.82	10.84	.0005
hours per week home with sitter	.22	1.19	1.34	3.06	1.5	4.13	n.s
hours per week home with relative	5.23	14.52	2.93	6.94	6.74	15.68	n.s
monthly cost of child care (in dollars)	00	00	\$173.54	\$108.29	\$402.29	\$197.44	.0001

4.11.c. Between group differences on satisfaction level, exo-and microsystem characteristics, and child care arrangements of mothers according to percentage of household income paid for child care.

	Group I n=200	Group II n=362	Group III n=83	Group I different from Group II	Group I different from Group III	Group II different from Group III
Variable	Mean	Mean	Mean			
Dissatisfaction with child care arrangements	2.46	2.26	2.7	no	no	yes
Percentage paid for child care	.00	.05	.20	yes	yes	yes
Concerns about quality	.31	.40	.52	no	yes	no
Little flexibility	2.8	3.2	3.2	yes	yes	no
Difficulty finding care	3.7	3.9	4.5	no	yes	yes
Household income	37,167	44,924	27,650	yes	yes	yes
age of youngest child	9.4	5.0	4.2	yes	yes	no
hours in center care	.14	16.11	24.16	yes	yes	yes
hours in family child care	.53	16.00	21.31	yes	yes	no
hours home with spouse	15.3	12.7	6.8	no	yes	yes
monthly cost of child care	00	\$174	\$402	yes	yes	yes
presence of spouse	80.5%	89.8%	51.8%	yes	yes	yes
(there were no other statistically significant differences between the groups)						

There is a limitation inherent in this data when using the mean to compare differences in use of child care arrangements. Specifically, the distribution does not correspond to a normal curve. This skewed distribution results in a standard deviation on most variables that is large, larger in some cases than the mean itself. In order to understand the distribution, it is helpful to look at the distribution on each variable within each group. Table 4.12 shows the median, mode, mean, and range of values on the variables included in Tables 4.11 a., b, and c. As an example, the frequencies for Group I, mothers paying nothing for child care, show that 47 (23.5%) report no hours in family child care for their youngest child, but one mother reports 13 hours of family

child care per week. While the mean for that variable is .53 hours, that one case makes the standard deviation 2.21. Table 4.12 shows the absence of a normal distribution on these variables. This is not at all surprising given the variety of arrangements, particularly the mix of paid and unpaid care, that is typical in most families. The table also shows how the distribution is skewed towards one end of the range or another. Parents tend to use one type of care predominantly with other kinds of care as a supplement, thus the distribution on a particular care arrangement may be skewed, thus not corresponding to a normal curve. This makes the means unreliable for prediction purposes. Since this pattern of distribution is reflected on all the variables within all the groups, however, an analysis of variance is still an appropriate way of examining the differences between the groups for the purposes of this discussion.

Table 4.12. Measures of central tendency for hours per week in center care, family day care, and spousal care for groups of mothers according to percentage of household income paid for child care.

Variable	Mean	Median	Mode(s)*	Range
Group One				
hours in center care	.14	0	0	0 to 6
hours in family day care	.53	00	0	0 to 13
hours with spouse	15.3	10	0, 5, 10	0 to 80
Group Two				
hours in center care	16.1	11.5	0, 20, 30	0 to 58
hours in family day care	16.0	12.0	0, 10, 15, 20, 24	0 to 85
hours with spouse	12.7	10	0, 8, 15, 24	0 to 99
Group Three				
hours in center care	24.1	27	0, 40	0 to 50
hours in family day care	21.3	17.5	0, 10, 30, 50	0 to 55
hours with spouse	6.8	0	0, 12	0 to 48

* demonstrates the multi-modal distribution on most variables.

Another group of employed mothers of interest in the public policy arena are women without a spouse or partner. As was shown in the regression analyses reported in Table 4.10.a., the presence of a spouse did not contribute a great deal to the variation in women's satisfaction with child care arrangements. A closer look however at how women with a spouse compare to those without a spouse or partner on the same variables offers information to better understand factors influencing the satisfaction of these employed mothers with their child care choices. Tables 4.13.a & b compare women with a spouse or partner present to those without a spouse or partner on the variables used in earlier analysis (Tables 4.11.a, b, and c). Employed mothers with a spouse or partner have significantly less dissatisfaction (Table 4.13.a.) with their child care arrangements and pay a significantly smaller percentage of their household income for child care. The age of the youngest child of the employed women in this study without a spouse or partner was 7.4 where the age of youngest child for women with a spouse or partner was 6.0 years. This is evidence that one way women manage child care arrangements is to delay workforce entry until their children are older, thus decreasing their dependence on child care. Since the women without a spouse or partner pay a greater percentage of their household income for child care and have lower household incomes than women with a spouse or partner, this could be one explanation of how they manage to balance their need for child care to the resources they have to provide it. All of the variables on which women without a spouse or partner differ significantly from women with a spouse or partner, with the exception of dissatisfaction with care arrangements, can be seen as related to the affordability of child care: affordability, household income, and age of youngest child. There is no statistically

significant difference between these women with spouses or partners compared to women without spouses or partners on the variables measuring quality, flexibility, accessibility, or number of children.

Table 4.13.a. Differences on exosystem and microsystem variables for mothers according to presence of a spouse or partner.

Variable	Women with spouse N=531		Women without spouse N=117		p value (one tail test)
	Mean	S.D.	Mean	S.D.	
1. Satisfaction with child care arrangements	2.27	1.06	2.89	1.57	.061
2. Affordability	.04	.05	.10	.13	.0001
3. Quality	.38	.66	.43	.63	n.s.
4. Workplace flexibility	2.97	1.36	3.38	1.42	n.s.
5. Accessibility	3.85	1.38	4.41	1.40	n.s.
6. Household income	43,995	16,015	23,630	12,082	.0001
7. Child's age	6.05	4.31	7.38	3.68	.042
8. Number of children <13	1.67	.84	1.50	.71	n.s.

Values of variables:

1. Satisfaction:	1= very satisfied, 5= very dissatisfied
2. Affordability:	percentage of household income paid for child care
3. Quality:	0= no concerns, 5= most concerns
4. Flexibility:	1= great deal, 6= none
5. Accessibility:	1= easy, 6= very difficult
7. Age in years	

Table 4.13.b shows the monthly cost and type of child care arrangements of women in this study with a spouse or partner and those without a spouse or partner. The data show significant differences in the amount of care provided by a spouse and in the home of a relative, both frequently unpaid care. The differences between these two groups of women, however, are significant on every variable except for the number of hours per week in a child care center. These data indicate different patterns of child care use among mothers by the presence or absence of a spouse or partner.

Table 4.13.b. Average hours per week and monthly cost of child care arrangements for mothers according to presence of a spouse or partner.

Variable	Women with spouse N=531		Women without spouse N=117		p value (one tail test)
	Mean	S.D.	Mean	S.D.	
Hours per week in child care center	14.54	16.79	14.89	16.88	n.s.
Hours per week in family day care	13.75	15.18	15.98	17.85	.025
Hours per week home with spouse	13.86	12.39	2.92	8.83	.002
Hours per week home with sitter	.87	2.57	1.82	4.06	.001
Hours per week at home with relative	2.73	7.40	9.74	19.37	.000
Monthly cost of child care (in dollars)	\$143.35	\$153.29	\$175.24	\$204.85	.022

The model guiding this study proposes that parents make choices within the constraints and opportunities in the environment. In order to test the applicability of this model to policy, the exosystem variables were regressed on parental satisfaction with

child care arrangements for each group: women paying nothing for child care, women paying less than 12% of household income for child care, and women paying more than 12% of household income for child care. In this analysis there is evidence of the tradeoffs discussed in the literature. Tables 4.14. a, b, and c show the variables kept in the equation by the stepwise method, the resulting R^2 , and the combined significance for all the variables in the equation.

Table 4.14.a. Effect of exosystem characteristics on parental satisfaction of mothers not paying for child care (n=177).

Variable	Beta	p value	R^2 for variables in equation
Accessibility	.249232	.0008	
Quality	.186578	.0112	
			.105

Table 4.14.b. Effect of exosystem characteristics on parental satisfaction of mothers paying less than 12% for child care (n=355).

Variable	Beta	p value	R^2 for variables in equation
Quality	.258641	.0000	
Accessibility	.174164	.0007	
			.105

Table 4.14.c. Effect of exosystem characteristics on parental satisfaction of mothers paying 12% or more for child care (n=83).

Variable	Beta	p value	R^2 for variables in equation
Accessibility	.337402	.0017	
Affordability	.211959	.0449	
			.164

Tables 4.14.a, b, and c reveal the differences between the women in this study who pay 12% or more of their household income for child care and their co-workers who pay less. For the women paying less than 12% (Table 4.14.b.), accessibility and quality have the most impact on satisfaction with child care arrangements. For women not paying for child care, accessibility has relatively more impact (Table 4.14.a.) than for those women are paying less than 12% of their household income for child care. For women paying more than 12% of their household income, quality falls out of the equation and accessibility and affordability have more impact on their satisfaction (Table 4.14.c). Within these groups, it is possible to see evidence of the trade-offs discussed in the literature.

Using the same methodology it is possible to explore the impact of exosystem characteristics in households with a spouse or partner present. Those employed mothers with a spouse are very similar to the mothers who are paying less than 12% of their household income for child care, although the contribution of quality and accessibility to satisfaction with child care arrangements is nearly 4% greater for women with a spouse or partner (Tables 4.15.a & b). Having a spouse or partner could decrease the difficulty finding child care arrangements, although a t-test for difference between mothers with a spouse or partner and those without a spouse or partner was not significant (Table 4.13.a). The same test found no significant difference in concerns about quality, so it is likely that the combined effect of presence of a spouse or partner, fewer concerns about quality, and less difficulty finding child care account for this increase in parental satisfaction. These findings, although still accounting for less than

15% of the variance in parental satisfaction, lend further support to the model for this study.

When looking at households with no spouse or partner, the only exosystem characteristic that is retained in the analysis is accessibility which accounts for less than 3% of the variability in parental satisfaction with child care arrangements. While this is statistically significant, it does not adequately explain the satisfaction of these solo employed mothers.

Table 4.15.a. Effect of exosystem characteristics on parental satisfaction of mothers with a spouse or partner (n=500).

Variable	b	Beta	p value	R ² for variables in equation
Quality	.423740	.272949	.00001	
Accessibility	.162914	.214727	.00001	
				.143

Table 4.15.b. Effect of exosystem characteristics on parental satisfaction of mothers without a spouse or partner (n=114).

Variable	b	Beta	p value	R ² for variables in equation
Accessibility	.209253	.187840	.0454	.027

Combined effects of income and presence of a spouse or partner: The analyses thus far have focused on the combined effect of one microsystem factor and the four exosystem factors. Because of the high correlation between household income and the

presence of a spouse or partner (.45) and the logic that these two factors should be important in affecting employed mothers' ability to make satisfactory child care arrangements, a subsequent analysis was run combining these two exosystem characteristics. This was done on the sample as a whole and on the separate groups of women who were not paying for child care, paying less than 12% of household income for child care, and paying more than 12% of household income for child care (Table 4.16). In these analyses, the combined effect of the two microsystem variables and two exosystem variables were considerably larger for those women paying more than 12% of household income for child care. In this analysis, the exosystem factors retained in the regression equation (accessibility and affordability; Table 4.14.c.) were regressed with income and spouse on parental satisfaction. In that analysis, income replaced affordability and presence of spouse did not meet the criteria for inclusion. The combined contribution of variables in the current analysis to parental satisfaction increased considerably from an R^2 of .164 to an R^2 of .21. These results indicate that income matters more than the presence of a spouse or partner and it is the combination of exosystem characteristics with microsystem characteristics that accounts most for parental satisfaction with child care arrangements.

Table 4.16. Combined effect of accessibility, affordability, income, and spouse on parental satisfaction of mothers paying more than 12% of household income for child care (n=83).

Variable	b	Beta	p value	R ² for variables in equation
accessibility	.341488	.313610	.0028	
income	.200342	.300650	.0041	.21

Summary of Results

Through a series of regression analyses, the contributions of microsystem characteristics of income, household structure, age of child, and exosystem characteristics of accessibility, affordability, quality, and workplace flexibility were examined to determine their contribution to parental satisfaction with child care arrangements. There were a number of possible indicators for the concepts addressed in the model guiding this study. All possible variables for each concept were analyzed for their contribution to variance in parental satisfaction and those accounting for the most variance were selected for inclusion in subsequent analyses.

The analyses demonstrate that microsystem characteristics individually or in combination account for very little variance in parental satisfaction. Further, these characteristics together do not account for a significant amount of variance. Exosystem characteristics account for more variance in parental satisfaction than microsystem characteristics. However, individual exogenous variables account for only a small amount of overall variance in parental satisfaction with child care. The amount of

variance accounted for increases when the effects of micro- and exosystem characteristics are combined and entered into the analysis. This is consistent with the model presented in Chapter One. The results of this study provide avenues for further study and can inform policy decisions.

Chapter Five will discuss the results and how they contribute to our understanding of factors affecting parental satisfaction with child care arrangements. The discussion will also address the policy implications of these findings.

CHAPTER FIVE

DISCUSSION AND POLICY IMPLICATIONS

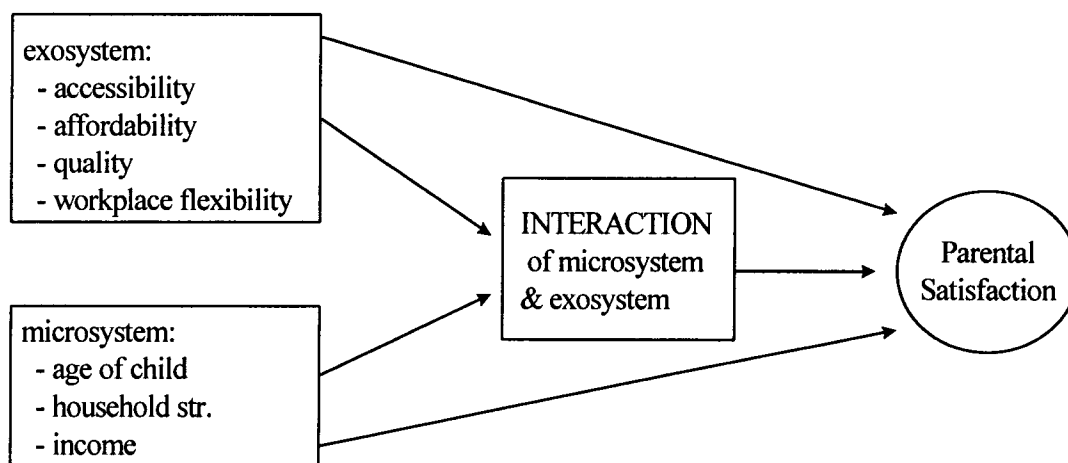
For every family there is a different story, a different set of circumstances, and different choices to be made. Behind the national statistics of increased participation of women in the labor force and the scarcity of suitable child care lie uncountable numbers of individual decisions and sacrifices required in an effort to accommodate what have proved so far to be unreconcilable realities of American family life (Zinsser, 1990, p.152).

The Model Revisited

The theoretical model underlying this study proposes that exogenous system factors (accessibility, affordability, quality, and workplace flexibility) have a greater influence on satisfaction with child care arrangements when considered in combination with microsystem factors (individual family circumstances of income, presence of a spouse, and age of youngest child). According to the model, the interrelationships between these nested sub-systems yield the greatest result in predicting parental satisfaction with child care arrangements. Within the context of the ecological system that surrounds the family, parents balance their preferences with the realities of their life. In this way the rational choice approach helps to further an understanding of family circumstances. Figure 5.1 represents the theoretical model presented in Chapter One upon which this study was based. In the model, both exosystem and microsystem characteristics contribute to parental satisfaction with child care arrangements, but it is

the combined effect of the two sub-systems that contributes the most to the variance in parental satisfaction.

Figure 5.1. Theoretical model for predicting parental satisfaction with child care arrangements.



The analyses reported in Chapter Four demonstrate that this model works best with the combination of the exosystem characteristics of availability and quality and the microsystem characteristics of income and household structure. Workplace flexibility did not make a significant contribution to parental satisfaction with child care arrangements in any of the analyses. The combination of child's age and affordability were particularly important for mothers paying 12% or more of their household income for child care but otherwise did not have a significant impact on parental satisfaction.

As might be expected, the presence of a spouse or partner increases household income in many cases. These two variables have a correlation coefficient of .45 ($p=.0001$). However, despite the high correlation between spouse and income, the

presence of a spouse does not guarantee higher income. Thirteen percent (13%) of the women in this study with a spouse or partner ($n=67$) had household incomes of less than \$25,000 a year. On the other hand, 41% of the households with no spouse or partner present ($n=48$) had incomes of \$25,000 a year or more. The availability of a spouse or partner and income combine with other factors to predict parental satisfaction with child care arrangements. As demonstrated in the analysis reported in Table 4.16, however, income contributes more to satisfaction with child care arrangements than the presence of a spouse or partner.

The model, therefore, is useful to explain the results of this study by demonstrating that it is the combination of microsystem and exosystem variables that predicts the most variance in parental satisfaction. These results, however, mask some important distinctions between groups of mothers in the study. The analysis of mothers who purchased child care, especially those who paid more than 12% of their household income for child care reveals those distinctions. The combined effect of microsystem and exosystem characteristics is most evident with these mothers paying the greatest percentage of their household income for child care. Quality and accessibility impact satisfaction with child care arrangements for all the mothers in this study and can therefore be considered as being important traits. When quality is considered independently for the mothers paying the greatest percentage for child care, it contributes virtually the same amount to satisfaction as for those women paying less. For women paying more than 12% of their household income for child care, quality accounts for 6% of satisfaction and for women paying less than 12%, quality accounts for 8% of satisfaction with child care arrangements. When additional exosystem

variables (accessibility and affordability) are added to the equation, however, quality no longer remains a significant contributor and drops out of the equation with women paying the greatest percentage of income for child care. The degree to which the employed mothers paying more of their household income for child care attain satisfactory child care arrangements seems limited by the microsystem resources of a spouse or partner and income. In other words, all mothers find quality important but some have an easier time getting it than others. How do the results of this study fit with earlier studies?

This was an exploratory study which examined a combination of variables that had been explored individually in several other studies. Unlike many other studies that looked at small samples or special groups of parents, such as welfare recipients, this study was based on a broad community sample of employed mothers relying on the full array of child care arrangements. It is helpful to compare the results of this study to those done earlier in the areas of interest in this study: parental child care arrangements, quality, accessibility, affordability, income, household structure and parental satisfaction.

Parental Child Care Arrangements

The child care arrangements of mothers in this study reflect what is seen nationally in other research (Brayfield et al., 1992; Hofferth & Wissoker, 1994). The mothers in this study used paid care more frequently than is reported in some studies (Emlen et al., 1993), but were paying a lower percentage of their household income for

child care than is reported in other studies (Hofferth et al., 1992; Marshall & Marx, 1991; Reeves, 1992). It could be that these mothers used fewer hours of paid care or had greater access to low-cost care from friends or relatives than most national studies have found. They had older children (the average age of the youngest child was 6.3 years) which could also explain this difference. The range of choices, however, and the distribution between center-based arrangements and family day care (care by a non-relative outside the child's home) is consistent with other reports (Hofferth, 1992; Zinsser, 1990). For those parents choosing out of home "market" care, child care centers and family day care homes were used equally. The National Day Care Study (Hofferth, 1992) reported that parental preference for type of paid care did not vary according to income. The results from this current study would support that finding. Hofferth did find, however, that if care was subsidized, use of center care would increase and care by a spouse would decline the most.

Contribution of Quality and Accessibility

Looking at the exosystem characteristics addressed in the study, the results reflect the findings in the literature regarding the importance of quality and accessibility to parents (Hofferth et al., 1991; Wolf & Sonenstein, 1991). Quality and accessibility contributed the most to parental satisfaction for the mothers in this study. The mothers in this study struck a balance between quality and accessibility, perhaps settling for less than what might be desirable if they did not have the resources to achieve their preference. This "trade-off" is revealed in the degree of difficulty that women most

dependent on paid child care had finding care of satisfactory quality. Quality and accessibility made the greatest contribution to satisfaction for most mothers in the study, however it is difficult to draw conclusions about what that actually means to these mothers. One reason for this is the way that quality was defined in the study. Mothers were not asked directly about quality, rather they were asked if they had concerns about several factors that have been shown in the research as contributing to quality. Despite the fact that more than half of the parents expressed satisfaction with their arrangements, only 26% liked everything. One-fifth of the parents were concerned about the safety of their children in the current arrangements and 13% were concerned that there were too many children. "Too many children" easily translates into concerns about the caregiver not providing enough attention to their child.

As with other research, the characteristics of quality most highly correlated to parental satisfaction were the caregiver herself, health and safety conditions, and concerns about the number of children being cared for. When asked if they had concerns about their child care arrangements, the characteristics of quality most frequently named were the child's safety and number of children being cared for. This is consistent with other research findings (Hayes et al., 1990; Lerner & Phillips, 1994; Zaslow, 1991).

As for accessibility, based on the results of this study, parental definition of accessibility includes much more than just convenience. The variables measuring convenience (distance from home and extra time required) were not highly correlated with satisfaction, whereas difficulty finding care was more strongly correlated with satisfaction. The concept of accessibility consists of a number of attributes, thus it is difficult to compare the results of this study to other research. As in other studies,

however, accessibility and wuality predict about the same amount of variation in parental satisfaction with child care arrangements.

Affordability

Affordability in this study was measured by the percentage of household income paid for child care. In the first phase of the research, other indicators were under consideration to measure affordability. The percentage of household income paid for child care proved to be more useful in predicting parental satisfaction than any of the other possible measures under consideration. This is consistent with the literature on affordability. Nationally, parents pay an average of 11% of their household income on child care (Culkin, et al., 1991; Hofferth et al., 1991). This is higher than the results in this study where the average was closer to 5%. Although slightly less than one third of the mothers in this study reported paying nothing for child care, the average of those mothers paying for care was 8 %, less than figures reported in other research. The range paid for child care by participants in this study was similar to that found in other studies. Those mothers paying 12% or more of their household income for child care paid an average of 20% of their household income. These results are very similar to those found in the National Child Care Study (1991). Whether the affordability criterion should be established at 11% as is indicated in some of the literature (Culkin et al., 1991; Hofferth et al., 1991), at 10% as established by the State of Oregon in its benchmarks (Oregon Progress Board, 1994) or at some other figure, it is clear that lower income parents bear a greater burden when it comes to paying for child care. Indeed, in this study the poorest

women were paying the greatest percentage of their income for child care. In addition, paying 10% of household income for child care has a much greater impact on a low income family's ability to manage than it does on a higher income household with more discretionary income.

Instead of choosing between affordability and quality as some researchers have suggested, it appears that all three factors, accessibility, affordability, and quality contributed to these mothers' satisfaction. They identified the range of options that they could afford and within those constraints made choices to find a balance for their particular situation. There is evidence in the study that gives clues as to how they accomplished this; relying on family members, working less than full-time, or perhaps delaying workforce entry until their children were older given that the average age of their youngest child was over six years old. In so doing, they managed the affordability dimension of the trilemma.

Although affordability as an exosystem variable alone does not predict satisfaction, it appears to define the context within which parents weigh the various options available to them. Evidence for this comes from the dramatically different results obtained in predicting satisfaction for mothers paying 12% or more for their child care arrangements. For these women affordability contributed more to their satisfaction than quality. For those women most dependent on paid care who have the fewest family resources (spouse and income), quality no longer makes a statistically significant contribution to parental satisfaction with child care, rather, accessibility and affordability take precedence. This does not mean that quality does not matter; data in the study show that when considered alone quality makes nearly the same contribution

to satisfaction for all women regardless of the percentage of household income paid for child care. It does mean, however, that within the constraints of low income, lack of spousal support and unavailability of affordable child care options, these mothers have limited ability to achieve the quality they might desire.

Workplace Flexibility

As was anticipated from the reviews of other research, workplace flexibility made little contribution to parental satisfaction with child care. Other researchers have identified this as a generally unexplored area, but the results from this study did not provide helpful information (Hofferth et al., 1991; Neal et al., 1994; Presser, 1990). In the 1991 National Child Care Study, Sandra Hofferth found that 30% of the women reported having flexible working conditions. In this study, nearly 70% of the mothers reported having some or a lot of flexibility. Intuitively, flexibility would seem to make a difference, but with the women in this study it did not. Mothers with higher income jobs reported basically the same rates of workplace flexibility as did mothers with lower income jobs. There were no significant differences revealed.

Income, Household Structure, and Child's Age

Of particular interest in this study was the contribution of microsystem characteristics, those family situations that might mitigate the adverse effect of the more global characteristics of the exosystem. The presence of a spouse or partner clearly

made a difference in the ability of employed women to make satisfactory child care arrangements. A spouse or partner increased the employed mother's flexibility, the affordability of her child care, and positively impacted her ability to find child care about which she had fewer quality concerns. In and of itself, the presence of a spouse or partner did not influence satisfaction. In combination with other exosystem characteristics, however, it did impact satisfaction.

The effect of family income is difficult to sort out from the effects of having a spouse or partner because the two characteristics are highly correlated. Based on the results of the regression analyses, however, income made more of a contribution to satisfaction with child care arrangements. This is reflected in the findings that the contribution of income to mothers' satisfaction with child care arrangements is greater than the contribution of household structure. Although some families report a change in distribution of household responsibilities, research indicates that women still carry the preponderance of child care responsibilities, with or without a spouse (Shelton, 1990). The majority of the women with a spouse or partner in this study reported having most or all of the child care responsibilities. Data from the male employees who were dropped from the analysis show that only 8% reported taking primary responsibility for child care arrangements. This may explain why income is more important than the presence of a spouse or partner.

Child care is a challenge, no matter how old the child is! Despite some indications in research that the age of the child matters, in this study it made less of a contribution than the other variables in the study. There is some evidence of an impact by the child's age on affordability, probably reflecting the fact that infant/toddler care is

the most expensive form of care due to the child/staff ratio required. Mothers of young children who are employed full-time also do not get the relief from child care expenses that mothers of school age children find. In this study, the average age of the youngest child was just over six years, so many of these mothers were able to rely on school for care that might otherwise be paid for. Many of the mothers in this study with young children were employed part-time thus lessening the potential impact of the age of the youngest child. The challenges are different, no doubt, according to the age of the child.

Satisfaction

Parental satisfaction with child care arrangements was the outcome under consideration in this study. Although reporting generally high levels of satisfaction, the mothers in this study reported lower rates of satisfaction than have been reported in other studies (Hofferth et al, 1991; Sonenstein & Wolf, 1991). Differences in how the question about satisfaction was asked may account for the lower rates of satisfaction in this study as compared to other studies. On a global measure of satisfaction, over one-third of the mothers in the study reported mixed feelings about their satisfaction with child care arrangements. The variation in parental response to the satisfaction question made the question useful for purposes of the study. It may well be, however, that the complex factors contributing to satisfaction are not measured by variables in this study. As the data regarding employed mothers in this study indicate, there are a number of factors that must be taken into account when assessing their satisfaction with child care arrangements. No single factor stands out as having the greatest impact on satisfaction;

indeed from this data it appears that there are important factors that were not included in the study.

At best, exosystem and microsystem characteristics were able to account for only 21% of the variation in parental satisfaction with child care arrangements. These employed women made myriad arrangements in order to manage the demands of employment and parenthood and any attempt to apply a simple answer to their dilemma would not be accurate. The complexity underlying parental choice of and satisfaction with child care arrangements supports the premises of rational choice approach which maintains that parents evaluate the cost and quality from among the available options, taking into consideration preferences, values, and available resources (Hofferth & Wissoker, 1994). Out of that process emerges a decision with which the parent is more or less satisfied.

The purpose of this study was exploratory. Using a sample of employed mothers drawn from a cross-section of the workforce, this research looked for relationships between numerous factors that indicate parental satisfaction with child care arrangements. While most of the relationships analyzed obtained statistically significant results, as a whole none of the analyses account for much variance in parental satisfaction. In terms of determining which factors contribute to parental satisfaction, the most promising analysis was that done with mothers paying more than 12% of household income for child care. There are a number of possible explanations for these results:

1. There are many factors predicting parental satisfaction, thus the contributions are spread amongst them and no one or two factors provide a simple explanation. This

conclusion is plausible since the contribution of most factors examined was statistically significant.

2. There are other factors not within the scope of the study that would account for more variance in parental satisfaction. For example, one likely predictor of satisfaction may lie in more definitive indicators of quality. As a secondary analysis, this study was limited in its ability to measure other characteristics of quality which might be more important to parents. Since quality is named in much research as the most important factor to parents, it is possible that this study did not reflect parental concerns that would have been more conclusive. While there has been extensive research into what early childhood professionals consider quality, there has been little research into *parent's* definitions of quality. This study relied on the factors identified by researchers. If the indicators were closer to parents' definitions, quality might have made a greater contribution.

3. The women surveyed in this study may be significantly different from parents surveyed in other studies. Much of the research on child care has been conducted with low-income populations, especially with an interest in the role that child care plays in welfare reform strategies. The women in this study represent women who are currently employed and have managed to make the child care arrangements they need to enter the workforce. Although they were not poor, many amongst them were managing on incomes low enough to be considered working poor. They have managed to overcome the obstacles to labor force participation commonly identified in the research.

Consistent with the premises of the rational choice approach, they have figured out how

to manage the cost of care, they have located an acceptable child care arrangement and, within the available options, they have found an acceptable level of quality.

As such, the results provide some interesting avenues to explore but no conclusive answers. The next section of this paper will examine in greater depth the policy implications suggested by these findings.

Policy Implications

As was detailed in Chapter Two, in the late 1980's, the shift in the child care debate shifted from whether government should be involved in child care in the United States to how the government should be involved (Klein, 1992). This discussion, however, was generally uninformed by research. For nearly two decades, the research focused on whether child care was good for children rather than on what needed to happen in order to make sure that good child care was available (Hayes, et al., 1990; Silverstein, 1991). As a result, there was virtually no data available to inform policy makers who were responsible for shaping the country's child care policies.

Increasingly, researchers have focused their attention on key policy questions (Hayes et al., 1990; Hofferth et al., 1991; Hofferth & Wissoker, 1994; Kammerman & Hayes, 1982; Feinstein, 1979; Zigler & Lang, 1991; Zinsser, 1991). They have emphasized the need to understand the dynamics behind mothers' decisions to work; to identify the strategies families use to manage work and family; and to examine the impact of public policies on parents' child care decisions (Hofferth, 1994). There is widespread agreement that this research must reflect the integration of scientific theory,

empirical study and program development (Hayes et al., 1990). Good research must also draw from multiple disciplines (Hofferth & Phillips, 1991; Kamerman & Hayes, 1982).

The Trilemma Revisited

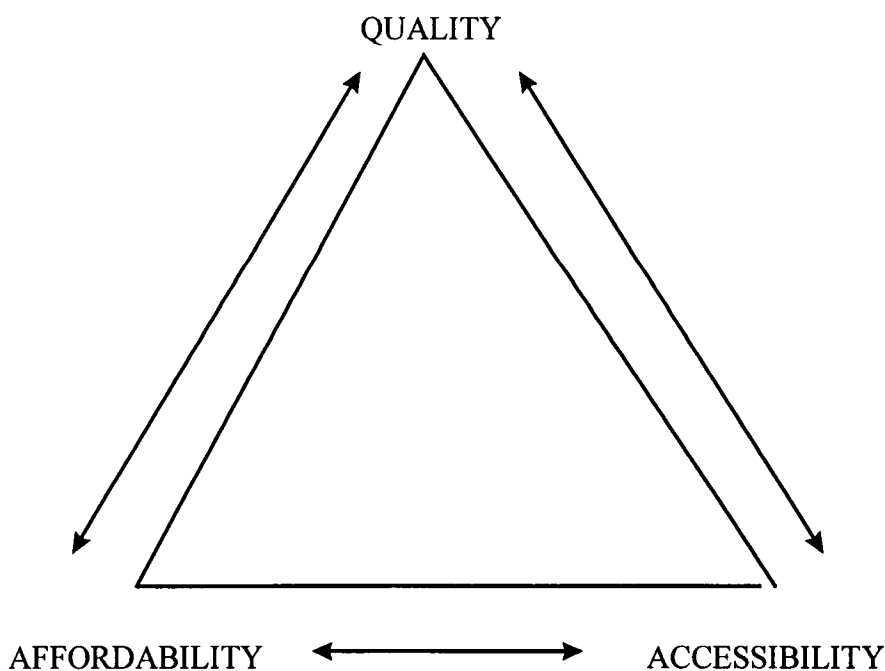
Just as parents and children operate in the nested environments of the ecological model, policymakers also operate in environments where different sub-systems interrelate and affect outcomes for children. They too must balance sometimes competing priorities and work within constraints to gain the best possible outcome (Hofferth & Wissoker, 1994; Ruopp & Travers, 1982). The exosystem characteristics of accessibility, affordability, quality, and workplace flexibility are the domain of both public and private policymakers and it is helpful to apply ecological theory to determine policy directions that will be most helpful to employed mothers.

The concept of the trilemma of child care is widely used in discussions of public policy direction (Hofferth et al., 1991; Willer, 1992). It is best understood as a triangle with accessibility, affordability, and quality at each point (Figure 5.2). The relationship between the three points of the triangle is based on a systemic understanding in which a change in any one dimension impacts each of the others. Thus any change in one must anticipate the effect on others in order to ensure that the system stays in balance.

In terms of child care, the most commonly discussed dimension in the trilemma is the balance between affordability and quality. This is generally because most efforts to enhance quality are likely to increase the cost of care, thereby diminishing affordability for many parents. Early childhood programs are labor intensive due to the

numbers of staff required to meet appropriate child:staff ratios. Decreasing the number of staff or keeping staff salaries low in order to cut costs can make the care more affordable but at the expense of quality and child well-being. Large groups of children or child:staff ratios that are too high, however, have been identified as decreasing the quality of care (Hayes et al., 1990; Lerner & Phillips, 1994; Phillips, 1992). High staff turnover and inability to recruit and retain qualified staff have been related to low salaries and absence of benefits in the field. High staff turnover and lack of qualified staff have been identified as significant contributors to poor quality child care (Helburn et al., 1995). Parents paying for child care must distinguish how much they are willing to risk decreased quality for their children in order to find affordable arrangements

Figure 5.2. The trilemma of child care.



This study demonstrates the contribution of quality to parental satisfaction, thus policies that help parents to know what the contributors to quality are and how they can identify them make sense. Such policies can enhance the ability of parents, especially for women in middle and upper income households, to make decisions which promote higher quality child care while operating within the constraints of accessibility and affordability. The constraints on obtaining quality that are faced by those women paying more than 12% of household income for child care call for strategies such as subsidies that reduce the financial impact of child care to supplement such consumer education efforts.

The data in this study imply that quality does not play as important a role in the satisfaction with child care arrangements for women paying a greater percentage of their household income for child care as it does for those women paying less. While it is true that accessibility and affordability are greater contributors with these women paying the greatest percentage of their income for child care, this does not mean they are not concerned about quality. A subsequent analysis of the independent effect of quality on parental satisfaction for women not paying for child care, women paying less than 12% of household income for child care, and those paying more than 12% of household income for child care, showed that quality was a concern to all three groups of mothers in this study. Thus, it is important that policies and programs be developed that address the needs of all parents, not only those groups identified as being at risk for one reason or another. For many years in the United States, there was a perception on the part of policy makers that child care was only an issue for certain groups of parents, for example, the very poor or families with severe problems. In her study of child care in

working class families, Harriet Zinsser pointed out “the low-income, working class families ... represent still another large population who are in great need of child care but have been largely neglected by public policy” (Zinsser, 1991, p.153). The employed mothers in this study may have much in common with many of the mothers in Zinsser’s study. They are like many working mothers everywhere, not on welfare and not exceptionally poor, but still struggling to make satisfactory care arrangements while they work. Their concerns with accessibility, affordability, and quality were evident in their responses to the survey.

Parents can be helped to identify, choose, and work to improve quality through consumer education strategies. Child care resource & referral services, widespread information campaigns through major media, and child care information provided at the worksite can all help to enhance parents’ abilities to ask for and select higher quality care. Research has shown that some parents can and would pay more for child care (Galinsky et al., 1995). Given the wide discrepancy in percentage of household income evidenced in this study and other national research, if parents understood and recognized the value of paying more, many could and would. If those parents who could afford to were paying more for child care, child care programs could afford to invest more in quality that would benefit all the children in the program. From a public policy perspective, widespread parent training and education is a good investment (Hofferth & Chaplin, 1994).

Regulatory policies play an important role in assuring a basic level of quality. Although this study did not survey parents’ attitudes towards regulation, other research indicates that parents do not value licensing (Zinsser, 1991). In contrast, the parents in

this study did indicate greater concerns about the conditions that are usually the domain of child care regulation: health and safety conditions, numbers of children, and caregiver characteristics. Licensing policy, however, must be developed so as to ensure parental involvement and support. Otherwise it becomes another constraint from the parents' point of view, limiting accessibility to child care and driving up cost without improving quality. Policymakers developing child care regulations operate in the context of the sometimes competing demands of parents and operators of child care facilities. Policies which promote strong communication between parents and child care providers can help ensure that regulations reflect the realities of both worlds. Just as parents must keep the dimensions of accessibility, affordability, and quality in balance, so must regulatory policymakers in order to assure that the resulting programs and policies are supportive of families' needs.

The majority of the mothers in this study had difficulty with finding child care arrangements. This finding should support efforts to build a supply of child care that addresses the diverse needs of all employed parents. Child care is needed for children of all ages, even for children over age 13 and it is needed in a variety of forms and at various hours throughout the work week. Finding care is as important to higher income, employed mothers as it is to lower-income employed mothers and it is important for policymakers to develop strategies that reflect this reality.

Policymakers As Consumers of Child Care

With the increasing awareness of the importance of child care to welfare reform strategies the trilemma has become evident in the public policy arena as well. Based on the income data of the mothers in this study, it is unlikely that any of them would be affected by current policies implementing welfare reform. Although steeped in considerable political rhetoric, most efforts at welfare reform involve the provision of child care and health care support to low-income working mothers so that they can transition off welfare. Currently, there is considerable concern about low-income mothers recycling back on to welfare if they do not succeed in the workplace. The jobs that most women move into as they transition off public assistance are similar to the lower income positions filled by the mothers in this study. It is becoming clear to many public welfare administrators that they have a stake in developing a child care system that serves all families. That way, services are available to families moving off public assistance, thereby decreasing the likelihood that they will return to welfare assistance. The women in this study with household incomes under \$25,000 a year provide extremely useful information regarding the world of work and child care for women moving off welfare.

How Might the Results of This Study Inform Policy?

Quality and accessibility were the most significant contributors to satisfaction with child care arrangements for most of the mothers in this study. The fewer the

options available, as indicated by lower income, the more difficult it was to find care with which they were satisfied. For those women paying the greatest percentage of income for care, accessibility and household income had the greatest impact on satisfaction with child care arrangements. Even though quality did not make a significant contribution to satisfaction, these women still had more concerns about the quality of care (Table 4.11.a). Their satisfaction level was significantly lower than the women paying a lower percentage of their household income for child care. With the women in this study, the link between quality, accessibility, and affordability was clear. It seems clear, therefore, that policy makers must keep all three factors in mind when implementing child care policies and programs for low income households.

The mothers in this study with lower incomes and no spouse were the most dependent on paid care, resulting in very high percentages of household income being paid for child care; it is these mothers who are most in need of subsidy. Although the survey did not ask about subsidies, it is probable that the women in this study were not receiving child care assistance at the time of the survey. Current policies limit access to subsidy for those employed mothers just above the poverty level, so that only the very lowest income mothers in this study would currently qualify for subsidies.

Nevertheless, the information available from this study is very relevant to the development of welfare reform strategies. Evidence is that inconvenient, unreliable, or unaffordable care may interfere with the ability of low-income working women to progress in the workforce, therefore it is advisable that government policies regarding child care take into account the realities of all families, not just those receiving welfare assistance (Feinstein, 1979; Hofferth & Wissoker, 1994; Meyers, 1993). It is also

important that eligibility for subsidies extend to serve those households above the poverty threshold in order to sustain the gains made by women moving off welfare dependency.

There are specific examples from this study that should inform policy makers.

1. Many of the women in this study with young children (under age 6) manage their child care arrangements by relying on a spouse or partner and working part-time. Those mothers with young children who cannot use those strategies are paying a greater percentage of their household income for child care and are less satisfied with the arrangements than the other mothers in the study. Thus, public policies affecting single women with young children should allow for part-time work while children are young. The data from this study show that mothers paying the greatest percentage of income for child care are less able to obtain quality they might desire in their care arrangements. Policies allowing them to work part-time while their children are young could increase the likelihood of their obtaining higher quality care. Such a policy would reflect the reality of employed women's lives and help address the trilemma of quality, accessibility, and affordability for these mothers for whom managing child care is especially expensive and challenging.
2. Federal child care debate recently focused on whether states could set health and safety standards for subsidized care. One position supported unlimited parental choice and saw regulation as interfering with parental access and thereby limiting the supply of child care. Others maintained that compliance with basic health and safety standards is necessary both for parent peace of mind and satisfaction as well as for the well-being of children in care. Although the mothers in this study were not asked about regulation, the

concerns most frequently stated regarding the quality of care were those factors most often covered in health and safety regulations (safety, number of children and caregiver qualifications). Therefore, the findings of this study would indicate that basic health and safety regulations are important to quality and stability of care for all parents.

3. Another area of current interest regarding public policy for subsidized child care has to do with child care rates. States are allowed to establish maximum reimbursement rates for child care. If those rates are significantly lower than the prevailing market rate in the community, however, parents receiving subsidies will not have access to a full range of child care options. This can occur either because the operator will not take the state subsidy or because the parent cannot afford to pay the difference. The rate, however, is important in assuring access to stable, appropriate care which helps to maintain and support the mother's workforce participation. With data indicating that income is relatively more important for some groups than quality in predicting parental satisfaction, it is clear that subsidies can play an important role in a low-income parent's ability to obtain quality in their child care arrangements. Federal congressional debate argued that the country could not afford to buy "cadillacs" for low-income working parents. Given the link between child care salaries and quality of care, however, the rates paid by government subsidy programs have a great deal to do with whether low-income working families can access acceptable care (Helburn et al., 1995). Based on the data in this study, most employed mothers balance the demands of work and arranging for child care by working less than full-time and relying on non-paid child care arrangements in order to manage. Public policies that place mothers in the position of requiring full-time employment without adequate subsidy for the cost of care are not

likely to promote long-term workforce participation. Thus, subsidy policy must also take the trilemma into account and develop rate structures that allow parents to access the care necessary to support them in employment. These rate structures must also be designed to facilitate a gradual transition from subsidized to unsubsidized care. As is evident from some of the mothers in this study, employment does not assure adequate income to meet the cost of child care. There is a place for government and for employers to assist during the transition.

Public policymakers making budget decisions regarding child care rates must decide how much value they will put on assuring quality and how much value they will put on purchasing more hours of child care at a lower price. Current federal policy is delegating those decisions to the state level and the extent to which state policymakers choose to “thin the soup” by authorizing lower rates of reimbursement in order to increase the number of families served by subsidies will largely depend on the success of advocates in demonstrating the long term adverse consequences to children and families of such policies. Research into the negative impact of poor quality care on children’s development and the impact that unstable, unsatisfactory care has on mothers’ workforce performance is proving important to that policy debate.

4. Accessibility is also of interest to policymakers, especially if they understand that accessibility of child care is key to the availability of the workforce. In the case of welfare reform, accessibility is central. Many state and federal legislators understand that availability of child care is essential if women are to successfully maintain employment and thereby decrease dependency on AFDC. It has also been widely recognized that certain types of care (e.g., infant/toddler, school-age, odd-hours) are

particularly important and especially difficult to find. One of the main reasons such care is difficult to obtain is because it is expensive to provide and low-income parents cannot afford the cost. Thus, the market-place does not provide an adequate supply. Many states are looking at specialized programs to subsidize the cost of operating such programs in order to ensure the necessary supply. Businesses too recognize that there may not be accessible care to meet the needs of their workforce and are engaging strategies which intervene in the market in order to generate the supply of care needed by all employees, regardless of income level.

5. The last area of discussion involves the extent to which government supports families through direct subsidy as contrasted to public support of infrastructure services such as information and referral, regulation and other supply building activities. The employed mothers in this study made it clear that their child care issues had to do with quality and accessibility. For the lower income families, affordability was clearly an issue but finding, choosing, and maintaining safe, appropriate care was important to nearly everyone. These factors transcend affordability and are essential if very low-income families moving off welfare are to achieve long term economic stability (Wolf & Sonenstein, 1991). Prior to the passage of the Child Care and Development Block Grant (CCDBG) in 1991, there had been little recognition that government had a role to play in building the infrastructure for child care in the United States. The CCDBG set aside 25% of the funds to increase the supply and quality of child care in the country.

The same legislation expanded tax credits for working families for dependent care expenses. At the time of this study, the benefit for which these employed mothers were most likely to be eligible for (and presumably receiving) were the Oregon state

and federal dependent care tax credits, which offered between \$200 to \$2000 a year tax credit (depending on family income and number of children). Tax credits are seen by many as the most appropriate federal form of child care assistance. The mothers in this study, despite the assistance of tax credits, still evidenced major difficulty finding child care about which they had no concerns. Tax credits may play a role in a package of public policies to assist employed mothers with their child care concerns. The evidence from this study would indicate that tax credits are not enough.

Recommendations: This study is guided by an ecological model that examines the relationships between the microsystem of employed women's lives and the exosystem of the policymaker's domain. Strategies that successfully make it easier for families must take both domains into account.

This study provides important information for both domains:

1. Concerns for the quality of care reach across all the employed mothers in the study and most are having difficulty finding care with which they are satisfied.
2. The solutions arrived at by the women in this study are as diverse and varied as the families themselves. There is no one solution that will serve everyone well.
3. It is not so simple that the solutions can be found by providing money and relying on market forces to work things out. Although the market-system with its reliance on supply and demand as regulating influences plays an important role, there are some important ways in which the market system can be influenced by public policy in order to better serve families.

For families, it is important that they inform themselves about the child care system in order to make choices that maximize the benefits for themselves and their

children. This means learning about the characteristics of child care settings that are most likely to provide quality for their children and taking the steps necessary to attain them. For families with the financial resources to pay more for higher quality, it means making the necessary financial commitment to support higher quality in their child care arrangements. For families with fewer economic resources, it means seeking out the subsidies that are available and advocating for more, whether from the government or from their employer. For all families, it means recognizing that they are not alone in their struggles to manage caring for their children while they work and joining with other families to work for improvements.

For policymakers, it means developing programs and policies that address all three aspects of the child care trilemma: accessibility, affordability, and quality. In order to do this, policymakers must be well-informed about the realities of families' working lives. In order to be well-informed they must support research that provides that data and they must ensure involvement on the part of parents in the development of policies. Finally, policymakers, like parents, must understand the long-term consequences of failure to act and make the necessary commitment to build a system of affordable, accessible quality child care.

Summary

This study of 642 employed mothers with children under the age of 13 provides a richness of understanding and a glimpse into the realities of their lives. These are not women relying on public support; they are gainfully employed and struggling with their

spouses, partners, and children to manage balancing their needs for employment with their children's needs for safe appropriate care. It is clear that they are creative, for the ingenuity with which they juggle formal care arrangements with the more informal support offered by friends and family shows in the rich tapestry of their child care arrangements. It is also clear that many are successful, they manage care with which they are generally satisfied and which they can afford. It is also clear that it is not without a price. While generally satisfied, nearly one-quarter of them would like to change their arrangement, most likely because of the quality of care. Even those mothers who manage without paying (most of them relying on their spouse or partner) are not fully satisfied. They too worry about the quality of care they have arranged for their youngest child. The numbers in this study don't tell the whole story, the lives of these employed others have a richer, fuller dimension that is expressed here. This study begins to meet a need that policymakers in the United States have for more systematic knowledge about the factors underlying employed women's child care choices. The study is exploratory, but even in its limited findings, there is evidence to substantiate other findings, thus adding to the knowledge important to building an effective child care policy. It is about time.

Developmentally appropriate care, provided in safe and healthy environments, has been shown to enhance the well-being of young children. It enables parents who need or want to work outside the home to do so, secure in the knowledge that their children are being well provided for. It can contribute to the economic status of families and enhance parents' own personal and career development. And since today's children are tomorrow's adult citizens and workers, their proper care and nurturance will pay enormous dividends to society as a whole.

Who Cares for America's Children?
National Academy Press, 1990

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APPENDICES

Lane
County

Youth Development Commission

**REGIONAL
RESEARCH
INSTITUTE**
for Human Services

Portland State University

Employee Survey

INSTRUCTIONS: Thank you for participating in our survey. Please enter your answer (number or letter) to the right of each question in the box provided. Also please note that every employee completes the first two pages of questions; however, the remaining questions are completed only if applicable. Consequently, the questionnaire is not as time consuming as it may appear. All responses are anonymous; you will not be identified in any way. We appreciate your frank answers.

1. Your age and sex? ("M"=male; "F"=female)

11 12 13
years

14 15
sex
2. Your occupation?
 1. Professional or technical specialist (non-nursing)
 2. Managerial or administrative
 3. Registered nurse
 4. L.P.N./Aide
 5. Sales
 6. Clerical
 7. Skilled crafts (carpenter, mechanic, electrician, etc.)
 8. Mail carrier
 9. Service (food, housekeeping, laundry, maintenance, security, aide)
 10. Sawmill worker
 11. Logger/cutter
 12. Machine or heavy-equipment operator
 13. Transport operator (truck or bus driver)
 14. Warehouse worker
 15. Non-farm labor
 16. Other: _____

14 15
years
3. Your job status?
 1. Full-time
 2. Part-time
 3. On call/relief

16
years
4. Your job shift?

1. Days
 2. Swing/evenings
 3. Nights
 4. Rotating
 5. Weekend only
 6. Other

17
days
5. Usual number of days worked per week?

18
days
6. Average number of hours worked per week?

19 20
hours
7. Do you work Saturdays or Sundays as part of your scheduled work?

1. Yes
 2. No

21
minutes
8. The amount of time it usually takes you to travel one way from home to work?

22 23
minutes
9. The zip code of your home address?

24 25
zip code
10. How long have you worked for this employer?

26
years

27
months
11. In the past four weeks:

How many days have you missed work other than vacation?

33 34
days

How many times have you been late to work?

35 36
times

How many times have you left work early or left during the day?

37 38
times

While at work, how many times have you been interrupted (including telephone calls) to deal with family-related matters?

39 40
times
12. Other than vacation, how many days have you missed work in the past three months?

41 42
times
13. How much flexibility do you have in your work schedule to handle family responsibilities?
 1. A lot of flexibility
 2. Some flexibility
 3. Hardly any flexibility
 4. No flexibility at all

43
times
14. Do you have a spouse (or partner) who lives in your household?

1. Yes
 2. No

44
times
15. If you have a spouse (or partner) in your household, does he or she work outside the home?
 0. Not applicable
 1. Yes, full-time
 2. Yes, part-time
 3. No

45
times
16. If you have an employed spouse (or partner) in your household, does he or she work the same shift as you?
 0. Not applicable
 1. Same Shift
 2. Partly overlapping shifts
 3. Different, non-overlapping shifts

46
times
17. If you have an employed spouse (or partner) in your household, will he or she also be completing this survey?
 0. Not applicable
 1. Yes, works for the same employer
 2. Yes, works somewhere else
 3. No
 4. Don't know

47
times

PLEASE CONTINUE ➡

Page 2

18. What is the approximate annual gross income of your household?

1. Under \$10,000
2. \$10,000-\$14,999
3. \$15,000-\$19,999
4. \$20,000-\$24,999
5. \$25,000-\$29,999
6. \$30,000-\$39,999
7. \$40,000-\$49,999
8. \$50,000-\$59,999
9. \$60,000-\$69,999
10. \$70,000 or more

48 49

19. What is your own personal annual gross income?

1. Under \$10,000
2. \$10,000-\$14,999
3. \$15,000-\$19,999
4. \$20,000-\$24,999
5. \$25,000-\$29,999
6. \$30,000-\$39,999
7. \$40,000-\$49,999
8. \$50,000-\$59,999
9. \$60,000-\$69,999
10. \$70,000 or more

50 51

20. Other than yourself and your spouse, are you eligible to claim any of the following persons as a dependent or exemption on your federal or state income tax?

1. Yes
2. No
3. Don't know

52

Children?

1. Yes
2. No
3. Don't know

53

Person(s) 65 or older?

1. Yes
2. No
3. Don't know

54

Disabled Adults?

21. Do you believe that family responsibilities have held back your career?

1. Definitely
2. Somewhat
3. A little
4. Not at all

55

22. Circumstances differ and some people find it easier than others to combine working with family responsibilities. In general, how easy or difficult is it for you?

1. Very easy
2. Easy
3. Somewhat easy
4. Somewhat difficult
5. Difficult
6. Very difficult

56

23. We would like to know which areas of life are creating difficulty, worry, or stress for people. In the past 4 weeks, to what extent have any of the following areas of life been a source of stress to you?

Your health:

1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

57

Health of other family members:

1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

58

Child care:

0. Not applicable
1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

59

Care for elderly or disabled adult family members:

0. Not applicable
1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

60

Personal or family finances:

1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

61

Your job:

1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

62

Family relationships, including extended family:

1. No stress at all
2. Hardly any stress
3. Some stress
4. A lot of stress

63

24. Do you have children under 18 (including your spouse's children) living in your household?

1. Yes
2. No

PLEASE CONTINUE

Page 3

If you have no children under 18 living in your household, please go to question #40 on page 5. If you do have children under 18 living in your household, please complete the following questions about the arrangements that you make for your children while you are at work. By "arrangements" we mean any way that children spend time or are supervised, including being home with your spouse, looking after themselves, or going to a child care program.

25. What are the ages (years) and sex (M=male, F=female) of the children under 18 living in your household? List the youngest to oldest. For children under 1 year, put "B" for baby.
26. Now we would like to get a picture of the child care arrangements (other than regular school) that you use while you are at work. Listed below are various child care arrangements; next to them are boxes for each child listed in question #25. For each child, please write the usual number of hours per week that each arrangement is used while you are at work or going to or from work; if not used, leave blank. For example, if your child spends 30 hours a week in a child care center and 10 more with your spouse at home, write a "30" and "10" in those boxes for that child.
- At home with my spouse/partner
- At home with an adult relative (18 or over)
- At home with an adult non-relative (18 or over)
- At home with a non-relative under 18 (sitter)
- At home with an older brother or sister under 18
- At home, looking after self
- In the home of a relative or ex-spouse
- In the home of a non-relative ("family daycare")
- In a child care center or nursery school (not public kindergarten)
- In after-school activities such as sports, clubs, or job

65	66	71	76	77	88
years	years	years	years	years	years
sex	sex	sex	sex	sex	sex
Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓
83					90
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
95					100
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
107					110
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
119					130
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
131					140
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
143					154
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
156					168
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
167					178
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
179					190
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week
191					202
hrs/week	hrs/week	hrs/week	hrs/week	hrs/week	hrs/week

27. How satisfied are you with the child care arrangement or combination of arrangements for each child? Using the scale below, write the number of your response in the column for each child.
1. Very satisfied
 2. Satisfied
 3. Mixed Feelings
 4. Dissatisfied
 5. Very dissatisfied

Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓	Column for above child ↓
203					208
number	number	number	number	number	number

28. Do any of your children have a physical, emotional, or developmental disability? If so, please circle his or her age at the top of the column.

PLEASE CONTINUE ■

Page 4

29. If you use child care in a non-relative's home ("family day care"):

How far is it from your home?

0. Not applicable
 1. Next door
 2. 1 or 2 blocks
 3. 1/4 mile
 4. 1/2 mile
 5. 1 mile
 6. 2 miles
 7. 4 miles
 8. 8 miles
 9. over 8 miles

Using the same choices above,
 how far is it from your work?

30. If you use a child care center or nursery school (but not public kindergarten):

How far is it from your home?

0. Not applicable
 1. Next door
 2. 1 or 2 blocks
 3. 1/4 mile
 4. 1/2 mile
 5. 1 mile
 6. 2 miles
 7. 4 miles
 8. 8 miles
 9. over 8 miles

Using the same choices above,
 how far is it from your work?

31. What things do you dislike (if any) about your current child care arrangements? Check all that apply.

1. I don't dislike anything
 2. Too far from home
 3. Cost too high
 4. Don't like program
 5. Don't like caregiver
 6. Too many kids
 7. Worried about safety
 8. Too dirty or unsanitary
 9. Other: _____

32. If your child looks after him/herself or is cared for by an older brother or sister while you are at work, what makes it possible for you to use this arrangement? (Check all that apply.)

1. My child is mature enough
 2. I can't find any better alternatives
 3. My child doesn't want to do anything else
 4. I have an older child whom I feel confident in
 5. I'm accessible at work
 6. My child wants more independence
 7. I have good neighbors
 8. I can't afford anything else
 9. Transportation to anything else is a problem

33. How often have you changed child care arrangements in the past year?

34. Do you plan to change your child care arrangements in the near future?

1. Yes
 2. No

35. When a child is sick, employed parents often have to choose between going to work and staying home. When one of your children is sick and you stay home, which of the following is most likely to make it possible? (Check all that apply.)

1. I use sick leave.
 2. I have flexible hours.
 3. I take a day off without pay.
 4. I use vacation.
 5. I do my work at home.
 6. Other: _____

36. About how much extra time (minutes) does your travel for child care add to your daily round trip travel time to and from work? If none, put "0".

37. To what extent do the management practices in your department, branch or office make it easy or difficult for you to deal with child care problems during working hours?

1. Very easy
 2. Easy
 3. Somewhat easy
 4. Somewhat difficult
 5. Difficult
 6. Very difficult

38. In your experience, how easy or difficult has it been to find child care arrangements?

1. Very easy
 2. Easy
 3. Somewhat easy
 4. Somewhat difficult
 5. Difficult
 6. Very difficult

39. How easy or difficult has it been to continue or maintain child care arrangements?

1. Very easy
 2. Easy
 3. Somewhat easy
 4. Somewhat difficult
 5. Difficult
 6. Very difficult

40. How much does child care cost you per month (if any)? For each type of child care that you use, write the average dollars per month that it costs.

In non-relative's home ("family day care")

In a relative's home

Someone who provides care in my home

Child care center or nursery school

Other: _____

PLEASE CONTINUE ➡

Page 5

41. How easy or difficult has it been to pay for child care arrangements?

0. I don't pay for child care
 1. Very easy
 2. Easy
 3. Somewhat easy
 4. Somewhat difficult
 5. Difficult
 6. Very difficult

271

42. Through your employer, do you use a plan that allows you to be reimbursed for your child care expenses with before-tax dollars?

1. Yes
 2. No

272

43. Do you claim a tax credit for child care? In other words, on your federal income tax return, do you claim any expenses that you pay for child care?

1. Yes
 2. No

273

44. In your family, who takes responsibility for child care arrangements?

1. I do completely.
 2. Mostly I do.
 3. Equally shared with spouse or other.
 4. Mostly spouse or other does.
 5. Spouse or other does completely.

274

45. Do child care considerations limit the number of hours you work?

1. Yes, that's why I work part-time.
 2. Yes, that's why my spouse works part-time.
 3. Yes, that's why my spouse is not employed.
 4. Only a little.
 5. Not at all.

275

46. Would you work a different shift, if you could get it?

1. Yes, if I could find child care to go with it.
 2. Yes, and child care is not an issue.
 3. No

276

47. Would you work more hours, if you had the shift and child care you wanted?

1. Yes, if I had the child care.
 2. Yes, if only I had the shift I wanted.
 3. No, I'm working just about as many hours as I want to.
 4. No, I'm already working more hours than I want to.

277

48. In the past year, have you called or gone to an agency for any of the following services relating to child care. (Check all that apply.)

1. Yes, for referral or help in finding resources.

278

2. Yes, for counseling or advice.

279

3. Yes, for a child care service for a sick child.

280

4. No, but I would have found it useful.

281

5. No, I didn't know of any such services.

282

6. No, I got all the help I needed from others (friends, neighbors, relatives, church, school, etc.)

283

49. Employees may have responsibilities for helping out adult relatives or friends who are elderly or disabled. By "disabled" we mean physically handicapped, frail, chronically ill, developmentally handicapped or seriously emotionally handicapped. By "helping out" we mean help with shopping, home maintenance or transportation, checking on by phone, providing care, making arrangements for care, etc. This includes persons who live with the employee or who live somewhere else. Which of the following best describes your situation? (Choose one.)

1. I currently have responsibilities for helping an elderly or disabled adult.

2. I don't have responsibilities for helping an elderly or disabled adult but probably will in the future.

3. I don't have responsibilities for helping an elderly or disabled adult but possibly will in the future.

4. I don't have responsibilities for helping an elderly or disabled adult and probably won't in the future.

284

If you answered "1" to the above question, that is, if you currently provide help to an elderly or disabled adult, please answer the questions below; if not, please go to the bottom of page 6 and give us your comments.

50. How many elderly or disabled persons are you currently helping?

285

51. For each person, tell us his or her age.

286

years

287

years

288

years

289

years

52. Do any of these persons live in your household?

1. Yes
 2. No

290

53. Do any of these persons live 100 or more miles away from you?

1. Yes
 2. No

291

54. On average, how many hours per week do you help this person(s)?

292

hours

55. In the past year, when this person(s) has needed help, who has usually been the one who has given it or seen that it was given?

1. I have been the only one.
 2. I have been the main one with some help.
 3. I have shared equally with other(s).
 4. Other(s), with my help.

293

56. What do you personally contribute to the cost of caring for this person or persons per month?

294

dollars mo

PLEASE CONTINUE ➔

Page 6

57. Through your employer, do you use a plan that allows you to be reimbursed for your adult dependent care expenses with before-tax dollars? 1. Yes ☐ 303
2. No ☐

58. Do you claim an income tax credit for any adult dependent care expenses? In other words, on your federal tax return, do you claim any expenses that you pay for such care as nursing services or adult day care? 1. Yes ☐ 304
2. No ☐

59. While you are at work, who provides care for or helps this person(s)? Check as many arrangements as applicable. Also, rate your satisfaction with these arrangements using the scale below.

1. Very satisfied
2. Satisfied
3. Mixed feelings
4. Dissatisfied
5. Very dissatisfied

Arrangements Satisfaction

(check) (number)

Looks after self

☐ 305

☐ 306

Adult relative or family member

☐ 307

☐ 308

Someone who was hired

☐ 309

☐ 310

Volunteer or unpaid visitor

☐ 311

☐ 312

Adult day care

☐ 313

☐ 314

Nursing home or care facility

☐ 315

☐ 316

Other: _____

☐ 317

☐ 318

60. When the person you are caring for needs assistance and you take time off from work, which of the following is most likely to make it possible? (Check all that apply.)

1. I use sick leave.

☐ 319

2. I have flexible hours.

☐ 320

3. I take a day off without pay.

☐ 321

4. I use vacation.

☐ 322

5. I do my work at home.

☐ 323

6. Other: _____

☐ 324

61. To what extent do the management practices in your department, branch or office make it easy or difficult for you to deal with adult dependent care problems during working hours?

1. Very easy
2. Easy
3. Somewhat easy
4. Somewhat difficult
5. Difficult
6. Very difficult

☐ 325

62. In your experience, how easy or difficult has it been to find care arrangements for this elderly or disabled person(s)?

0. Not applicable
1. Very easy
2. Easy
3. Somewhat easy
4. Somewhat difficult
5. Difficult
6. Very difficult

☐ 326

63. How easy or difficult has it been for you to provide care or help to this elderly or disabled person(s)?

1. Very easy
2. Easy
3. Somewhat easy
4. Somewhat difficult
5. Difficult
6. Very difficult

☐ 327

64. People who have responsibilities for providing adult care often have difficulty knowing where to turn for help. How easy or difficult has it been for you?

1. Very easy
2. Easy
3. Somewhat easy
4. Somewhat difficult
5. Difficult
6. Very difficult

☐ 328

65. In the past year, have you called or gone to an agency for any of the following services relating to the care of, or help for, adult family members or friends? (Check all that apply.)

1. Yes, for referral or help in finding resources.

☐ 329

2. Yes, for counseling or advice.

☐ 330

3. Yes, for a respite-care service.

☐ 331

4. No, but I would have found it useful.

☐ 332

5. No, I didn't know of any such services.

☐ 333

6. No, I got all the help I needed from others (friends, neighbors, relatives, church, school, etc.)

☐ 334

Please give us your comments.

☐ 335

Thank you for answering the survey questions. Please return this questionnaire in the envelope provided.

APPENDIX B

MULTIPLE REGRESSION TABLES

Combination of microsystem variable and exosystem variables

Method: Stepwise

Dependent Variable: Satisfaction

Equation Number 1: Accessibility Quality Flexibility Affordability

Household Structure

Adjusted R² .14342

Standard Error 1.09517

<u>Variable</u>	<u>b</u>	<u>SE b</u>	<u>Beta</u>	<u>T</u>	<u>Sig.T</u>
Accessibility	.172736	.032622	.203742	5.295	.00001
Quality	.391153	.067710	.219884	5.777	.00001
Household	.517492	.114933	.170188	4.503	.00001
Structure					
(constant)	1.441216	.133190		10.821	.00001

Variables not in the Equation

<u>Variable</u>	<u>Beta In</u>	<u>T</u>	<u>Sig. T</u>
Flexibility	.040509	.981	.3272
Affordability	.018430	.467	.6409

Equation Number 2: Accessibility Quality Flexibility Affordability

Income

Adjusted R² .13674

Standard Error 1.10155

<u>Variable</u>	<u>b</u>	<u>SE b</u>	<u>Beta</u>	<u>T</u>	<u>Sig.T</u>
Accessibility	.178919	.032792	.210440	5.456	.00001
Quality	.380890	.068313	.213881	5.576	.00001
Income	.082705	.020864	.150257	3.964	.0001
(constant)	1.124140	.158310		7.101	.00001

Variables not in the Equation

<u>Variable</u>	<u>Beta In</u>	<u>T</u>	<u>Sig T</u>
Flexibility	.053261	1.287	.19872
Affordability	.017840	.442	.6586

MULTIPLE REGRESSION TABLES

Combination of microsystem variable and exosystem variables

Method: Stepwise

Dependent Variable: Satisfaction

Equation Number 3: Accessibility Quality Flexibility Affordability

Child's age

Adjusted R² .12473

Standard Error 1.10706

<u>Variable</u>	<u>b</u>	<u>SE b</u>	<u>Beta</u>	<u>T</u>	<u>Sig.T</u>
Accessibility	.195566	.03624	.23670	5.995	.00001
Quality	.391355	.068448	.219997	5.718	.00001
Age of child	.028123	.010775	.098648	2.610	.0093
(constant)	1.274989	.150862	.098648	2.610	.00001

Variables not in the Equation

<u>Variable</u>	<u>Beta In</u>	<u>T</u>	<u>Sig T</u>
Flexibility	.054250	1.301	.1936
Affordability	.111412	2.731	.0065